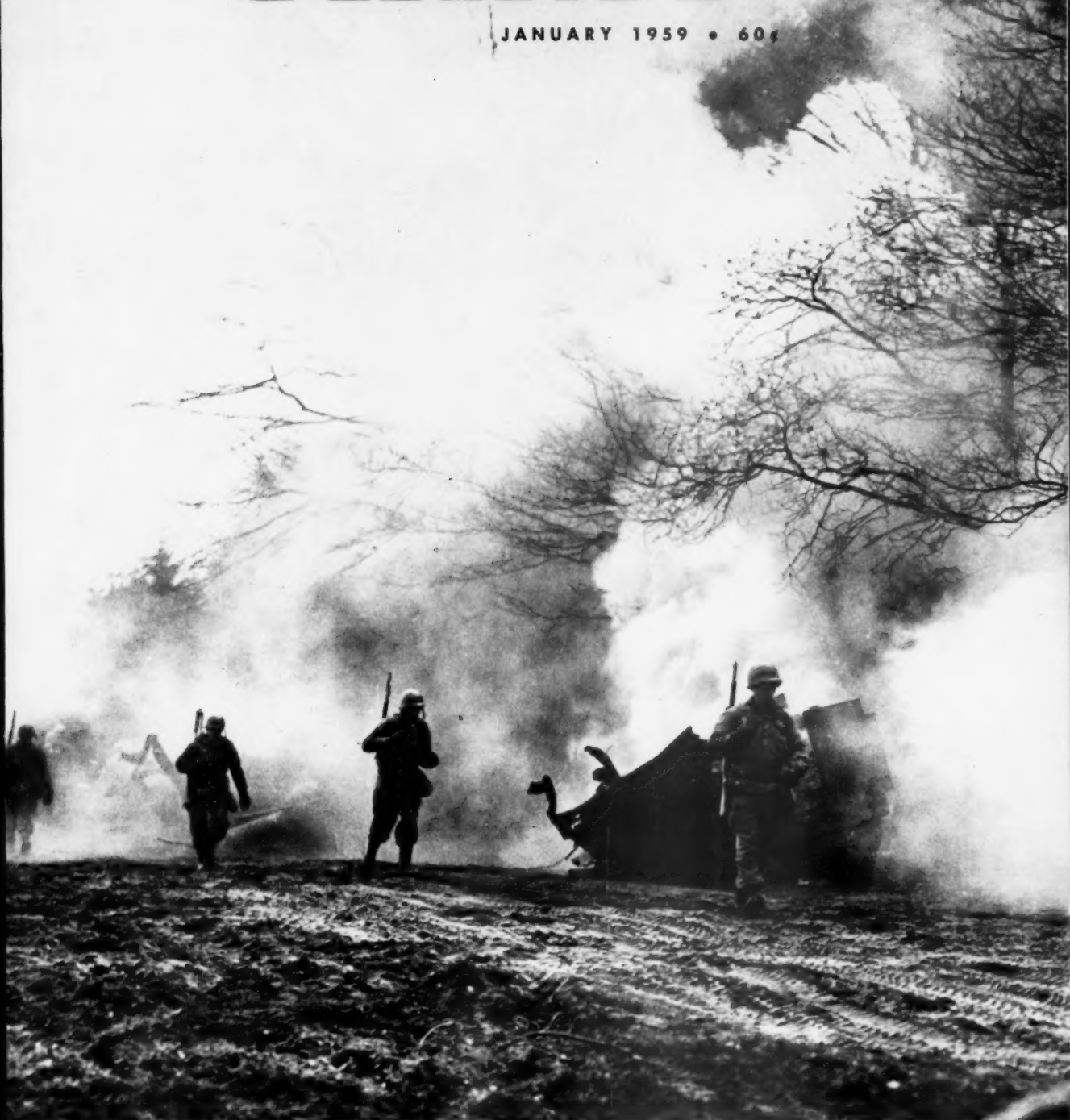


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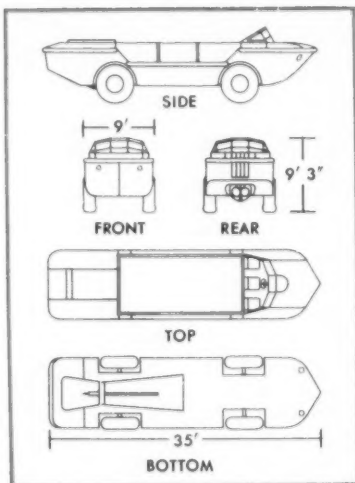
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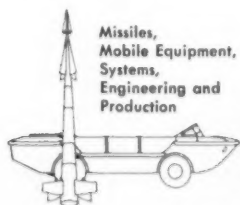
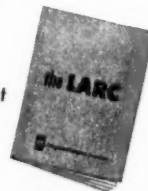


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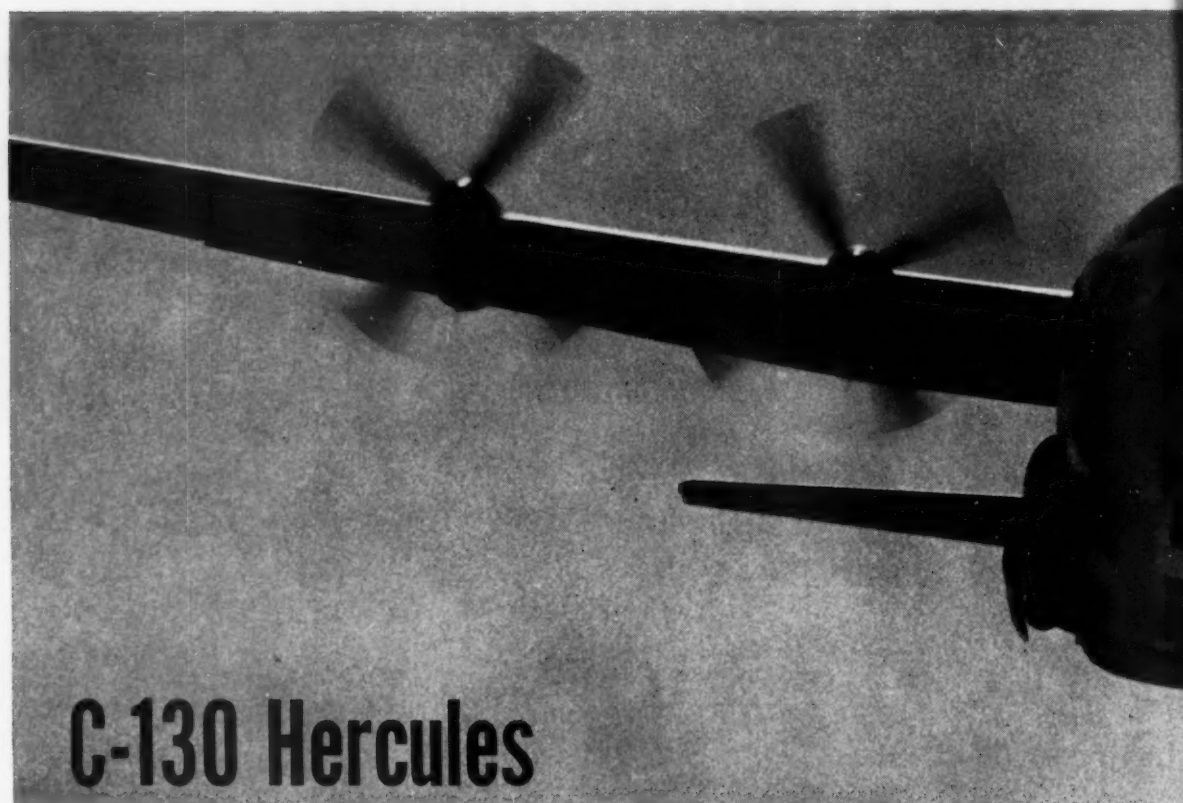
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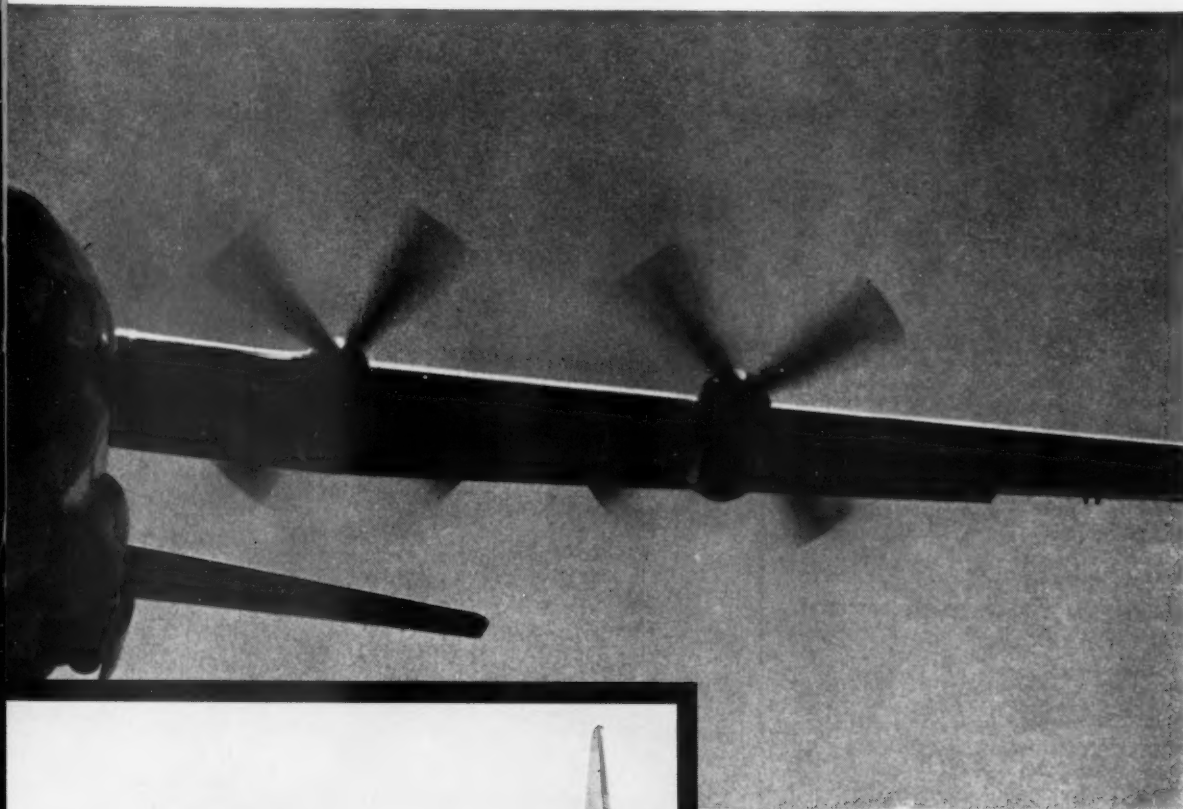
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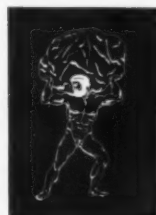
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ARMY

magazine of the ASSOCIATION OF THE UNITED STATES ARMY

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No. 6

January 1959

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THE MONTH'S MAIL

Recommendation

- Recommend strong action be taken to protest cut of 30,000 in Army forces.

MAJOR LAMAR W. TAYLOR
Carlisle Bks, Pa.

The Basic Training Mold

- Colonel Swift's "Basic Training Isn't Simple" is a good evaluation of the problem, and its suggestions for solving it are very good. But I think it fails to consider the harm that comes from undue harassment of soldiers during basic training.

After my eight weeks of basic I had a hearty dislike for the Army, and in my opinion, was poorly trained. I believe the reason for this was my sullen rebellion against the harassment I got during basic training.

A good example of what I mean occurred when a team of second lieutenants roared through our barracks. For every discrepancy they found, they dumped the offending recruit's gear from his bunk to the floor. My offense was a dirty bore. The young lieutenant who discovered this looked at me indignantly and shouted, "Your bore is dirty!" It probably was. I'd never owned a rifle before in my life and didn't even know what a clean bore was supposed to look like. I had just run a couple of patches down the bore and figured it was clean. No one had told me differently.

This treatment hardly made me like the Army. When errors were made, the fact that the error had been made was played up instead of showing us how to correct it. When a recruit failed to master a subject, no effort was made to help him learn it. Instead, he spent his after-duty hours taking his punishment. Perhaps this would make him try harder in the future, but what he had failed to learn was gone forever without any chance of making it up.

These things make definite impressions on men just entering the Army, and mold their attitude toward the military life. If a recruit tried his best by being especially attentive in class or by taking extra pains with his chores, his buddies, for the most part, felt that he had been bullied into it and was frightened of the cadre.

After basic training I was assigned to the 82d Airborne Division, which I think is a damned good outfit and one

of which I am extremely proud (partly because my father had served as a paratrooper in it during World War II). Through good training and the type of hard soldiering that makes one feel like a man, my attitude toward the Army took a big change. When I was discharged last March I was a sergeant and had received the Good Conduct Medal. This doesn't sound like much to some people, but I think it was a real achievement after the basic training I hadn't received.

My ambition now is to receive a Regular Army commission through ROTC (I am too old for West Point). If I had had no desire to become an officer I would have re-enlisted. So far as I am concerned, there is but one life for me: the Army.

One hears many former soldiers speak of the Army and its professionals with ridicule, contempt, or dislike. When many of these men are asked why they feel the way they do, generally they start with their basic training. The last mile of a speed march is pretty tough going, but it isn't a fraction as hard as having someone shout in your face about how dumb you are after you've made an error while learning something that is new and strange to you.

PATRICK E. ANDREWS
Wichita, Kans.

- "Basic Training Isn't Simple" is one of the best and most comprehensive pieces on the needs of our training centers I've had the pleasure of reading. It should be read by all soldiers.

It has long disturbed me, when visiting training centers, to find junior lieutenants commanding basic-training companies. It is obvious, by looking in at our many headquarters, that to say a shortage of captains and field-grade officers exists is mere rationalization. If we really believe basic training is important, we should see that only people with proper grade, experience and qualifications are assigned.

Army Regulation 611-255, recently published, requires that only experienced members of the Regular Army be used to conduct classification interviews at training centers. This is important, but not more so than insuring that cadremen who come in contact with recruits on a day-to-day basis are of the highest caliber. Only top graduates of noncom-

missioned officer academies should be assigned. Training and discipline must be hard and realistic, yet reasonable. The people conducting training must be so devoted to their jobs that they will go all out to motivate, encourage and inspire the recruit to absorb what is taught. There is no place for immature, unjust or unreasonable types of discipline and training. Training is a man-sized job.

Among many reasons why we get less qualified people in training cadres are the undesirable conditions. True, to be a good trainer, one must be dedicated. But even the most dedicated has a family and other obligations, which also must be considered. Therefore, why work at a training center for 16 hours a day when you can land a staff job and work a much-less-trying eight hours?

Why can't manpower-control teams be more realistic (and they can be, with proper prodding from senior commanders and staff-section chiefs) and staff the centers with enough people for a 16-hour day? Of course, we must realize that manpower-control teams are not always at fault. It is too easy to blame them for our lack of leadership. Many times lower-unit commanders fail in their responsibilities to subordinates. The Army is in competition with industry and the other services for manpower. Therefore, personnel practices at the lowest level must be progressive and dynamic.

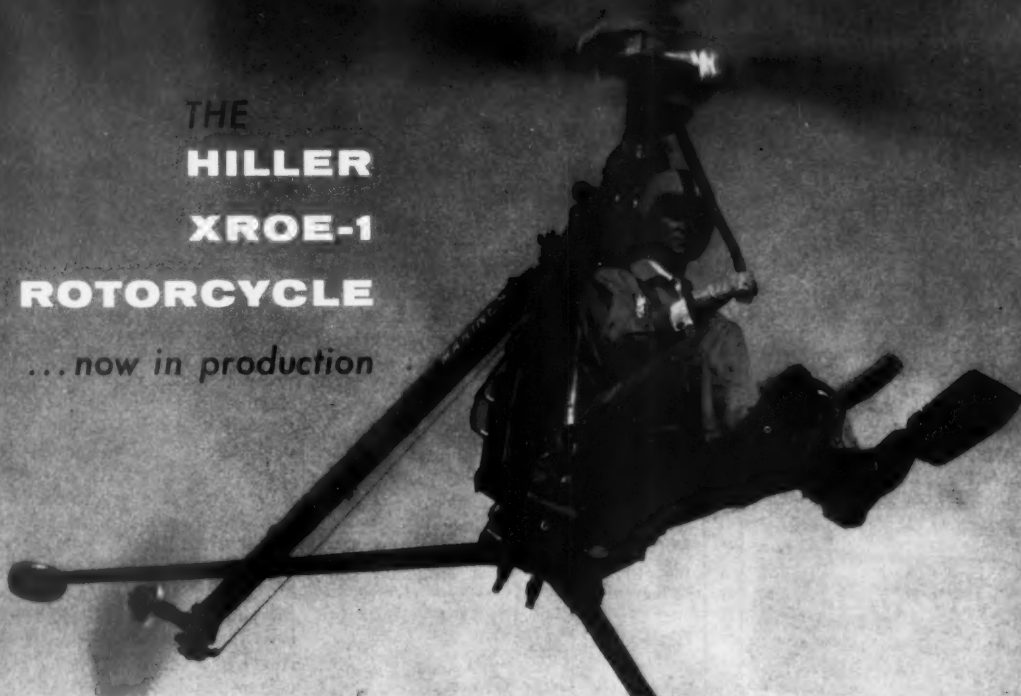
We can't be afraid to let our people work on a shift schedule, with a 40-hour week, and adjust the Army to acceptable industrial standards. Sixteen hours a day for eight weeks of training is good and necessary to prepare the recruit for the eventual trials and pressures he must expect in combat. However, this same grind, for two or three years, only serves to drive the most efficient from the training center to a homestead outfit, a staff position, or into industry.

When these things are corrected, then perhaps general officers no longer will have to correct cadremen who can't spot errors in drill movements and check haircuts and the personal appearance of recruits. Topnotch noncommissioned and company-grade officers will take care of these little things in the proper manner.

If only we can keep our techniques in handling human relations at the same pace with our developments in weapons and logistics, we can solve many of our problems. Let's remember that the train-

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ers as well as the recruits are human beings.

CAPT. THOMAS C. CLARY
Fort Benj. Harrison, Ind.

Proud of Wolfhounds

• I would like to express my appreciation for the layout of my article ["Basic Training Isn't Simple"] in the November issue, particularly the illustrations by Lt. Col. Lachlan Field. Also, I think the editing improved the article considerably. (I'll bet you don't get that compliment very often!)

However, in order that members of the 27th Division do not consider me an impostor, and so that my old comrades of the 27th Infantry Regiment (25th Division) will not think I am ashamed to have been a member of it, I would like to correct that part of the biographical sketch which says I led a battalion of the 27th Division in the Pacific. I led the 1st Battalion of the 27th Infantry from New Caledonia to Luzon in 1944-45. I was very proud of my Wolfhounds, and would like them to know it.

That was a fine piece on General Church by Sergeant Kleinman. I recognized a former boss, the CO of the 21st infantry, in one of the pictures. Also, I thoroughly enjoyed General S. L. A. Marshall's article on Lebanon. Things like those make me a long-long subscriber to ARMY Magazine.

COL. EBEN F. SWIFT

Chicago, Ill.

PX in the Olive Grove

• "Amid Doves and Olive Branches," by Brig. Gen. S. L. A. Marshall in your October issue was thoroughly enjoyed.

We hate to take exception to such an excellent article, but there was a PX in Lebanon, and I believe we were in operation at the time of General Marshall's visit. Too bad he couldn't have visited us at our tent in Chouiefat for a little more first-hand information.

CAPT. WILLIAM A. CLEM
Munich Central Exch.
APO 696, NYC

• The copy of The Exchange Post which Captain Clem enclosed says that "On July 16, within hours after receiving a request from the Chief Quartermaster of the U. S. Army in Europe [European Exchange Service] vans were rolling with such things as cigarettes, shaving cream, razors and blades, and toiletry items." It was the first time EES participated in an over-the-beach operation.

Completely Workable

• As a member of East Bay Chapter of AUSA, I wish to express my appreciation for printing "A Job for Officers Who Want to Continue to March" in the November issue. Further, I compli-

ment Col. John A. Gavin, for having the idea and the nerve to write it, and the editors for publishing it.

This is the most refreshing, completely new idea I have yet to see on the subject of prohibitive legislation affecting Government employment of retired Regular Army officers. If implemented by well-designed legislation, Colonel Gavin's idea could be completely workable and of inestimable value to the Government and to American society.

The Army's technical services have many billets in which selected retired officers, under this scheme, would work marvels for the Army over a long-range program. Of these, I cite only two fields in which they could make great contributions to the Army and the Nation: as purchasing and contracting officers, and in certain administrative positions in the quality-assurance programs for materials purchased by the technical services. The preparatory training of young officers for these posts is long and expensive. Indispensable functional experience for such activities cannot be bought at any price short of time in on-the-job training. Today, the required functional experience is owned only by active-duty officers and those retired officers who have spent considerable portions of their active-duty time in these jobs.

In my opinion, Colpnel Gavin's idea has such great merit that it deserves the full support of AUSA as a suggested basis for needed legislation. I urge that ARMY give active and full editorial support to the idea, and that AUSA propose a program of enabling legislation to the Department of Defense.

To bring the matter into sharp focus in Congress, I further suggest that AUSA would do well by placing a reprint of Colonel Gavin's article, supported by pertinent editorial comment, on the desk of each member of the Armed Services Committees in both houses of Congress.

COL. RICHARD L. LEWIS
Alameda, Calif.

Reading-List Curmudgeon?

• What do Thomas K. Finletter and Mao Tse-tung have in common? Apart from being mortals who tread the dusty earth and who are physically corruptible, they would seem to be two of the most diverse personalities one could imagine. Indeed, the essential contradictions between these two persons are emphasized in the Chief of Staff's Contemporary Military Reading List.

Mr. Finletter is cut in for one seventeenth of all the reading recommended for Army personnel while Mao is ignored. History may prove this a wise decision. For one thing, Mr. Finletter certainly is more entertaining than the rotund revolutionary. For another, our ex-Secretary of Air clearly is a man with his future be-

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fore him. Mao's military glory, we hope, lies in the past. Thirdly, Mao doesn't now have the political appeal of Mr. Finletter.

However, everyone proclaims that history is fickle. The sunshine of Clio's smile is as transitory as the grasp of that other fickle lover, Lady Luck. In the long sweep of time, what happened in Yenan and at the Yalu may prove to be as significant as New York state politics. Clio's clasp of Mao may prove to be more enduring . . .

These possibilities should be apparent to the page-turners at the War College. As should the fact that Mr. Millis's work is a vehicle for a defense of Dr. Oppenheimer.

The leftist, anti-Army (in the sense of the interests of the Army face to face with the propagandists of airpower and the nothing-but-massive-retaliation school) bent of the reading list is so apparent that one wonders who in the Army made the selections. Ignoring the importance of China and apologies for Oppenheimer are the most pertinent aspects of this bent. To be sure, it is somewhat compensated for by the inclusion of several works which view the matter in more realistic perspective. (Particularly, Fainsod, Garthoff, Guderian, Huntington, Kaufman, Miksche.) The overall effect, none the less, is almost un-

believably anti-Army and pro-airpower.

Why two books by Finletter and none about any aspect of Communist China or Chiang? Where is the matter of Eastern Europe? And Germany? What's happening here? Am I just a sour old curmudgeon?

MAJ. WALTER DARNELL JACOBS
New York, N. Y.

No More Yardbirds

Not every man has the chance I have to relive his youth. Sixteen years ago I went through a Army reception center for the first time. Now I am in the process of being processed again. Believe me, it brings back memories.

At the risk of stepping on the toes of some World War II contemporaries, I must say that the inductee of today seems superior to his counterpart of my first Army days. My observation may be, and probably is, mellowed by advancing years, but these are certainly clean-cut, intelligent, and well-behaved youngsters. I have not seen one drunk recruit in this reception center. They play volleyball, pool, checkers, go to the gym and service club and to church. They do what they are told to do without grumbling. Their area resembles a big college campus rather than a military reception center. How different from my first trip through Fort Thomas, Kentucky, in 1942!

This trip has renewed my faith in the Army's choice of personnel. Even the PFCs, who seem to run these places, are courteous. Believe that, if you can, WWII vets. It is a pleasure to associate with the men I meet here. It will be a privilege to help train them.

SGT. JACK W. ACLIN
Replacement Co, USATC (FA)
Fort Chaffee, Ark.

UCMJ and the CMA

● Congratulations on "Soldiers versus Lawyers," by Col. Frederick Bernays Wiener [November] which touches upon a subject all too rarely mentioned in public these days. From my own brief career and subterranean position in the military hierarchy, it is so painfully obvious that UCMJ is not a workable scheme for a disciplinary system in a military establishment. For some time I, and many of my company-grade colleagues, have marveled at its longevity.

Colonel Wiener mentions various cases where the decision was reversed or set aside by CMA in favor of the accused, on what appeared to be (according to the article) just or at least legal grounds. There is no mention of the monstrous miscarriages of justice which are perpetrated every day by special and summary courts-martial, which can be attributed to the make-up of UCMJ. I refer in general to instances where the accused avoids any punishment at all, or gets a greatly reduced sentence through a flaw in the wording on charge sheets; where trial counsel fails in some part of his ritual; or some similar superficial triviality which perverts justice at the expense of the service.

I recall a special court-martial case I defended a couple of years ago, in which the soldier was admittedly guilty. I and the court (as well as every man in the soldier's unit who knew about the case) were aware of this. But because he confessed prior to being read Article 31, I obtained a "not guilty" decision—and I'm no Clarence Darrow. This, in my untrained legal opinion, is not justice. Neither is it, to my sorrow, very unusual.

Colonel Wiener's proposed reform is a step in the right direction. But more than a mere order is needed to re-establish a system of justice based on honor. One much-needed reform will have to be made in our stockade system. In a system where a prison tour becomes a pleasant experience, one can hardly expect the threat of confinement to deter crime or breaches of discipline.

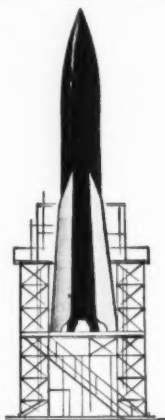
A third and last step to rectify our unfortunate state of discipline and justice would have to be re-education of officers and men now in service. Justice based on honor needs men who know and appreciate honor. Alas! I fear that all too frequently we rationalize our honorable

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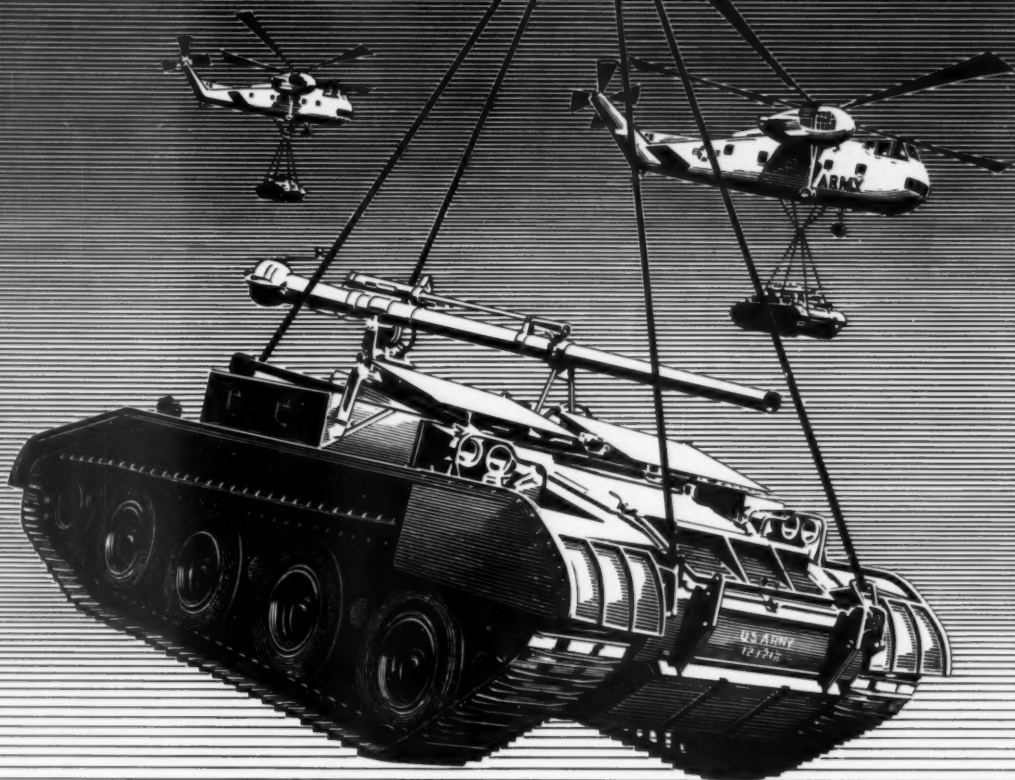
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ideals away on the wings of expediency and fear of political repercussions. A system employing honor would reduce the present frantic trend to try civil offenses in military courts, thereby establishing an Army more acceptable to fighting men as a way of life, as opposed to our current efforts to find a million models of Jack Armstrong, the All-American Boy.

LT. DONALD B. FOUGHT
Fort Geo. G. Meade, Md.

• I venture to say that Colonel Wiener's article, provocative as it was, certainly will draw many comments, if it hasn't already done so. Here's mine.

I feel that Colonel Wiener's contention that lawyers went too far in enacting UCMJ is not valid. I'll brush aside the opening remarks of the discussion on the Court of Military Appeals with this observation: Regarding the so-called elimination of "the heat" off members of Congress, may I parenthetically state that in my experiences in military law and administration, the outcome of courts-martial or board actions is emphatically not determined by Congressional influence. If any letters are written, they are merely to procure information. Thus, to make a generalization (certainly through innuendo) as was done regarding Congressional influence in military justice administration is manifestly unfair to the Congress.

The reason for CMA or for any appellate tribunal, civil or military, is found in the pragmatic concept that there must be a finalization to adjudication. The analogy may be made to the U. S. Supreme Court and its review of appellate court cases. In the military, the Board of Review acts as an intermediate appellate authority; the Court of Military Appeals is the final review. Certainly there have been gross failures by military trial courts; errors have been made which presumably "shocked the conscience of the court" and Colonel Wiener. However, does not the Supreme Court constantly reverse and remand criminal cases for the same or similar errors?

At first blush it would seem that my arguments do not answer those of the article. Colonel Wiener does commend the Court and recognizes its necessity, but kindness can kill, too. The Court is there not for "the convenience to Congress in having a civilian court," but rather because of changes in judicial reforms contemplated in 1920. For example, Army Boards of Review to hear all courts-martial convictions that resulted in sentences including disciplinary discharges, confinement for one year, did not materialize. It was the concept of command control and other individual restrictions which prompted the passage of UCMJ and this so-called "GI supreme court."

Colonel Wiener's prime contentions that discipline is no longer present are based on General Sherman's beliefs that recognizing certain fundamental rights (now in our Code) will ruin discipline, institute an adversary system in the Code by the so-called extension of the Code to greater fields. These contentions are pure conjecture, and beg the question.

During my short experience I have discovered that the majority of officers and men are not hostile toward lawyers. Quite to the contrary, I imagine there is more respect granted us in military than in civilian communities. Further, the officer and the enlisted man, merely by donning a uniform, *does not* doff the vestiges of Americanism. Individual rights must be maintained.

Has the fact that the military and Congress recognized this ruined discipline? Not that I have observed. There are many tools granted to unit commanders by the Code. The object is to learn to use them or have them explained, and this is constantly being done with the aid of members of the JAGC. Further, merely because the "investigatory process" in virtually every routine case is in the hands of the inadequate and frequently vicious CID (and I emphatically disagree with this charge), this has not, and does not, in any way relieve the company commander from making his own independent investigation.

No, the problem of maintaining discipline is not so simple as Colonel Wiener suggests: removing the administration of military justice from the "cops and the lawyers." The division between discipline and individual rights will always exist; to make them compatible requires education. Remember, if our enlisted men and officers find themselves stripped of their basic rights, then everything our Army stands for will go for naught.

LT. ROBERT S. POYDASHEFF
Ft. Benning, Ga.

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LT. COL. CHARLES A. MURRAY
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ARMY

...NEWS IS HAPPENING AT NORTHROP



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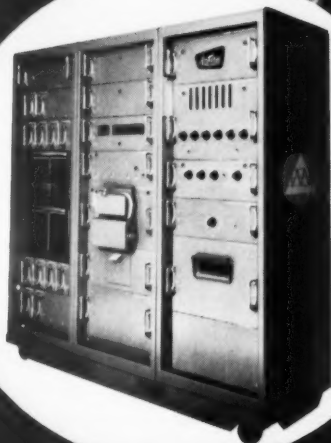
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The Future of the Infantryman

WHO doubts that the infantryman of the not very distant future will wear a plastic uniform with built-in radio, carry a nuclear weapon, use explosives to dig his foxholes, have targets pointed out to him by electronic devices, travel across country in lightweight armored carriers or fly in aerial jeeps, eat irradiated and dehydrated foods, and perhaps even carry miracle drugs that will assure his survival even though badly wounded?

It is easy to say today that this will be the picture of the infantryman in next decade. He will be a soldier with considerable potential strategic and tactical mobility and he will command great firepower. Like the infantryman of old, his effectiveness will depend upon how good a man he is, how well he has been trained and disciplined, and the organizational and tactical concepts that give direction and meaning to his efforts.

The most disappointing news to come out of the Infantry Conference at Fort Benning last month was confirmation of the often stated fact that too many American youths today are physically unable to stand up to the requirements of military training. They aren't good enough men. This is important to all Americans and not just to the infantry, though the effectiveness of that arm of close combat is certainly vitally affected by the physical capabilities of the men of the infantry.

The facts about the physical softness of American youth are generally known. But to pinpoint them here's a statement by Dr. G. Ott Romney, Deputy Executive Director of the President's Council on Youth Fitness:

"Total fitness for living effectively and happily in today's society encompasses fitness to accept appropriate military duty. Evidence and testimony are abundant that youth is quite generally unfit for military service. This condition is bound to be true because findings, chiefly pragmatic and empirical but some stemming from recognized research, indicate that sedentarianism, pushbuttonitis and indoorism have taken heavy toll of fitness to accept the variety of everyday strains and stresses and to function zestfully in civilian life. This is not a blanket indictment of youth. It is rather to say that this generation of the tallest, heaviest and most nearly disease-free youth in all history is being subtly victimized by an age of mechanization, standardization, specialization, urbanization and materialism—an era of science and machines and their blessed yet terrifying offspring. . . .

"It is important to know that those who 'pass the draft'—those who are accepted for military service are a disappointing lot, generally speaking, if we can believe the records and analyses of major Army training centers for engineers and infantry, of marine training stations and other military establishments. The studied opinions of the commanding officers underscore or go

beyond the interpretation of statistics. . . ."

The implications of this are frightening. Clearly it is past time for Americans to spend less time in pointing with pride at our high standard of living, at our automatic machinery and at our awesome missiles and spend more time viewing with alarm the weakening of our bodies.

It is accurate to say that this is a task that must be done by the home, the school and social agencies long before our youth enter military service. It is more than a military problem; physical softness is bound to have an adverse effect on all aspects of our society and there is evidence that weak bodies beget weak minds.

While this is a national problem it affects the military directly. As CONARC said in a recent directive:

"In peacetime the Army is a small hard core; therefore the principle of similar training standards in peace and war is not applicable. Our standards must be better in peacetime. We may have fewer units, but they must be all around better and ready units."

It should be stipulated here that one of the problems facing the Army in creating these all around better and ready units is that the Army is not getting the physically best American youth. Dr. Romney suggests this in the statement quoted above. And the workings of the Selective Service system confirm it. There is one hope here and that is that the recent authority to eliminate those draftees who are so inapt as to be unable to perform as soldiers also serves to eliminate the physically soft. It may be that this is more of a pious expression of hope than a true reflection of fact and what is needed for today's requirements is a Selective Service system that selects the best—*physically* and mentally—rather than being a system that screens out only the obviously unfit.

But beyond this stipulation the military can and should do more. Some deficiencies in the military's system of physical fitness were contained in the Ranger Department's presentation on physical fitness at the Infantry Conference. This is what was said on this subject:

"One reason for the present undesirable level of Army physical fitness is the insufficient PT [physical training] hours in ATPs [Army Training Programs]. One hour per day is adequate for the attainment and maintenance of an acceptable level of physical proficiency; yet not one program approaches this requirement. The program for basic combat training allocates 20 hours for physical training from a total of 384 hours, or five percent of the total training time.

"Other Army training programs continue with a low percentage of physical training hours. Little opportunity is afforded for speed marches or other training which

(Continued on page 18)



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FRONT AND CENTER

Sen. Richard B. Russell (Dem.-Ga.), Chairman of the Senate Armed Services Committee, believes the security of the nation requires an army of one million officers and men.

"I'll fight against attempts to reduce the size of the Army," the influential Senator told the Columbus-Phenix City-Ft. Benning Chapter of AUSA.

Another powerful Georgian, Rep. Carl Vinson, Chairman of the House Armed Services Committee, is also known to be opposed to reductions in Army strength.

The test will come early this year when administrative plans for FY 1960 become known. Gen. Taylor is on record as believing at least 925,000 is necessary. Present directives require the Army to go to 870,000 before the end of the present fiscal year, although Congress voted funds for 900,000.

* * *

The Army's Jupiter C nose cone, the first known object to have been recovered from outer space, has found a permanent home at the Smithsonian Institution. Secretary of the Army Wilber M. Brucker presented the nose cone to Dr. Leonard Carmichael, secretary of the Smithsonian. The cone, which traveled to an altitude of more than 300 miles and a distance of some 1,200 miles, is the one shown on television by President Eisenhower in November 1957. It has been covered with a plastic to hide the material of which it is made.

* * *

Tests of the use of Army Reservists to augment active Army Nike batteries during emergency operations will be conducted in February. The objectives are to determine the capability of on-site Nike batteries to train Army Reservists and to maintain the proficiency of reservists who have had Nike service. If the tests prove successful, the USAR will be capable of providing the nation with a ready reserve mobilization force of missile specialists. The tests will run for about six months using Army Air Defense Command Nike batteries in the Chicago area.

In his inaugural address on 26 August 1957 as President of the Judge Advocates Association, Col. Frederick Bernays Wiener, USAR, expressed his opposition to special pay for service lawyers similar to the extra pay service doctors get. He stated three grounds for his opposition.

"First, it is indefensible [because] it proposes to pay more to the JA in the rear area, sitting where the JA usually sits, than to the soldier getting shot at up front. . . .

"Second, the bill cannot possibly pass. . . .

"Third, the bill does not get to the heart of the difficulty. . . ."

The Board of Directors of JAA dis-

agreed with its President. On 1 November in a meeting at Washington it voted a resolution favoring special pay for lawyers because "the level of inexperience in the legal departments of all services will continue to rise unless immediate action is taken leading to the retention of officers serving in legal capacities in the Armed Services, and . . . professional pay, increased rank and other incentives for lawyers . . . are deemed to be essential to the furnishing of adequate legal services to the Armed Forces by their respective military legal departments."

Sixteen of the 20 members present voted for the resolution. One abstained and two voted with President Wiener

SOLDIER—The Unifying Image

The active Army, the Army National Guard and the Army Reserve are all one army and the "image" all components must project is that of the "Soldier," Gen. Bruce C. Clarke, Commanding General of the Continental Army Command, wrote recently in a letter to all Army commanders.

The full text of the letter:

"The more I examine the problem of maintaining combat-readiness in the face of reductions of personnel and funds, the more I am convinced that the traditional concept of the Army Reserve, National Guard and Active Army as "One Army" must be vigorously implemented.

"Not only does this apply to standards of training and performance, but to everything we say and do. If parochialism in inter-service relations has a cancerous effect upon the Armed Forces, certainly parochialism within the Army would be just as self-destructive if permitted to flourish between our various components.

"The Active Army, reserve components and Army civilians represent a force of over four million. If each member were imbued with this concept, we would have a force on the grass roots level in America capable of carrying the story of the Army to our people in the best interest of National Defense and preparedness.

"While I know that the Active Army has come a long way in promoting Army unity, I believe that we can do even more to replace the image of the Regular or the Guardsman or the Reservist with the single image of the SOLDIER. Since real unity is an internal as well as external matter, the "One Army" attitude must pervade all ranks.

"I intend to pursue this objective at every opportunity with all appropriate means, and I ask that you do the same."

SPERRY INTRODUCES...

New portable radar safety meter for survey of microwave power fields

Like many technical developments, the high-power microwave systems now coming into wide military use present an unexpected problem. Medical and military leaders alike are concerned with the safety of personnel working with these "super radars" which generate tremendous microwave energy fields in their transmitters and antennas.

Current information indicates the surest methods for establishing safe working conditions near powerful microwave devices involve survey measurements of microwave power density in the area. But, until now, application of this principle has been restricted because engineers have lacked suitable portable equipment for

making these measurements.

As a leading producer of advanced radar systems, Sperry has devoted extensive research to the problem of assuring safety in their operation. Result of this investigation is the new Microwave Power Density Meter. Weighing only 6 pounds, the meter provides a simple but highly accurate method of exploring the existence of concentrated energy or "hot spots" close by high-power microwave antennas, transmitter tubes and plumbing. It is completely portable and contains its own power supply.

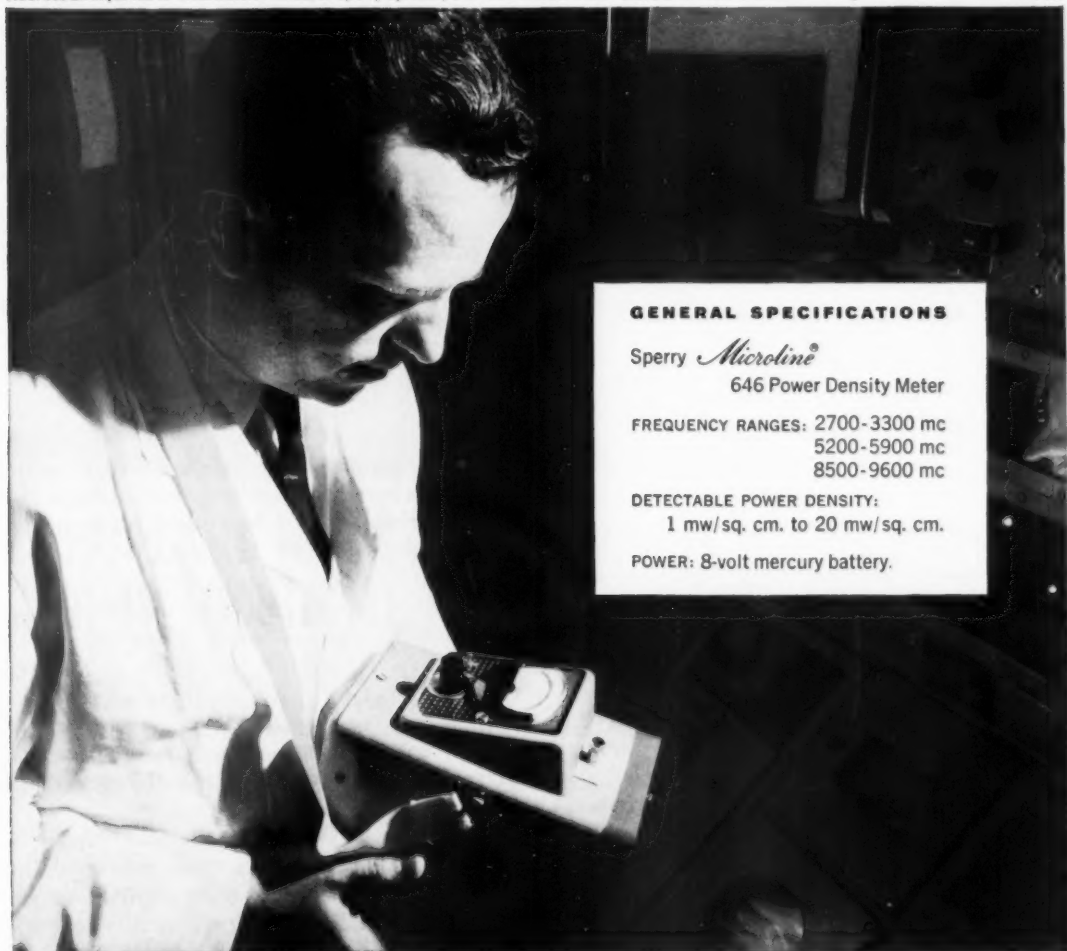
Utilizing the presently accepted safe energy level of 10 mw/cm², the Sperry meter quickly registers the relative

power density above or below the acceptable level. The meter is scaled to read in mw/cm². A single knob operates the meter, permitting its use by nontechnical personnel.

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General Officer Shifts

Maj. Gen. VERDI B. BARNES to Artillery & Missile School . . . Maj. Gen. CHARLES E. BEAUCHAMP to Eighth Army . . . Maj. Gen. RAYMOND W. CURTIS to II Corps (Reserve) . . . Maj. Gen. THOMAS E. DESHAZO to Third Army . . . Maj. Gen. CYRUS A. DOLPH to MAAG, Vietnam . . . Maj. Gen. WILLIAM P. ENNIS, JR., to Army War College . . . Maj. Gen. GERALD E. GALLOWAY to Engineer Center . . . Maj. Gen. ROBERT V. LEE to TAG . . . Maj. Gen. SAMUEL L. MYERS to ODCSLOG . . . Maj. Gen. ANDREW P. O'MEARA to EUCOM . . . Maj. Gen. JAMES B. QUILL to USAREUR . . . Maj. Gen. FRANK A. TOBEY to Chief of Chaplains . . . Brig. Gen. GUNNAR C. CARLSON to OCORD . . . Brig. Gen. ETHAN A. CHAPMAN to USARADCOM . . . Brig. Gen. JAMES W. COUTTS to Caribbean Command . . . Brig. Gen. CHARLES G. DUNN to OJCS . . . Brig. Gen. BRUCE EASLEY to Deputy TAG . . . Brig. Gen. AUGUSTUS G. ELEGAR to USATC (Fort Ord) . . . Brig. Gen. ROY T. EVANS, JR., to Deputy TQMG . . . Brig. Gen. JAMES P. LAMPERT to MAAG, Vietnam . . . Brig. Gen. HAL C. PATTISON to OJCS . . . Brig. Gen. JOHN D. F. PHILLIPS to III Corps . . . Brig. Gen. ROBERT N. TYSON to OCA . . . Brig. Gen. FREDERICK T. VOORHEES to OCoT . . . Brig. Gen. SHERBURNE WHIPPLE, JR., to Army Advisory Group, Korea.

Retirements. Maj. Gen. CRUMP GARVIN . . . Maj. Gen. HERBERT M. JONES . . . Maj. Gen. PATRICK J. RYAN . . . Maj. Gen. ARCHIBALD W. STUART.

against the resolution.

Promptly thereafter Colonel Wiener resigned his presidency. He could not, he said in his letter of resignation, "remain as the Association's titular head while it pursues its avowed object." The resolution, he said, transforms the JAA from a "professional organization, of great potential value . . . into a mere 'gimme' group, extending an outstretched palm."

* * *

A few years ago the idea of a missile

that could deliver supplies seemed a rather distant dream, but now it appears that it isn't as mystical as some then thought. Under an Army Quartermaster Corps contract the Convair Division of General Dynamics Corp. has developed a cargo missile that can deliver rations, ammo, medicine, communications equipment or other high priority supplies to frontline troops accurately and in quantity. Known as the "Lobber" this first generation cargo missile and its launcher can be hand-carried

and operated by a three-man crew in the field. Details such as dimensions, range, payload or launching and landing techniques have not been disclosed.

A cargo missile such as the "Lobber" suggests interesting and highly useful capabilities. When speed of delivery is vital, when bad weather prevents air drops, when the enemy controls the air space over a combat area, when difficult terrain impedes normal logistics, cargo missiles will pay off.

* * *

The Army's rate of rejection for drafted men has increased about ten per cent as a result of higher standards effective last August. The rejection rate has risen from about 35 per cent to 45 per cent, and substandard men are eliminated before they are inducted. Previously they were screened out in training. The Army will draft 9,000 men during January 1959, a drop from the recently running average of 11,000 a month.

* * *

Safety procedures and safeguards for the Army's air defense missile systems are adequate, a special civilian committee appointed to review safeguards at Nike sites, reported to Secretary of the Army Wilber M. Brucker. Mr. Clifford F. Hood, president of the U. S. Steel Corporation, chairman of the group, said that "all practical precautions have been taken to provide safe operating systems."

The committee found that safety

THE FUTURE OF THE INFANTRYMAN

(Continued from page 14)

will physically harden troops. Training schedules are so tight that few commanders can physically harden their troops.

"Another reason is the surprisingly high percentage of officers who have little or no knowledge of the fundamentals of physical training. Without this background there can be no effective physical training programs.

"Lack of permanent records of individual physical fitness can be cited as another contributing factor. There is a requirement for physical proficiency or physical deterioration to be recorded on personal records.

"All of these reasons point the way toward continuing physical deterioration of the Army with resultant unreadiness for the rugged physical demands of nuclear warfare. . . .

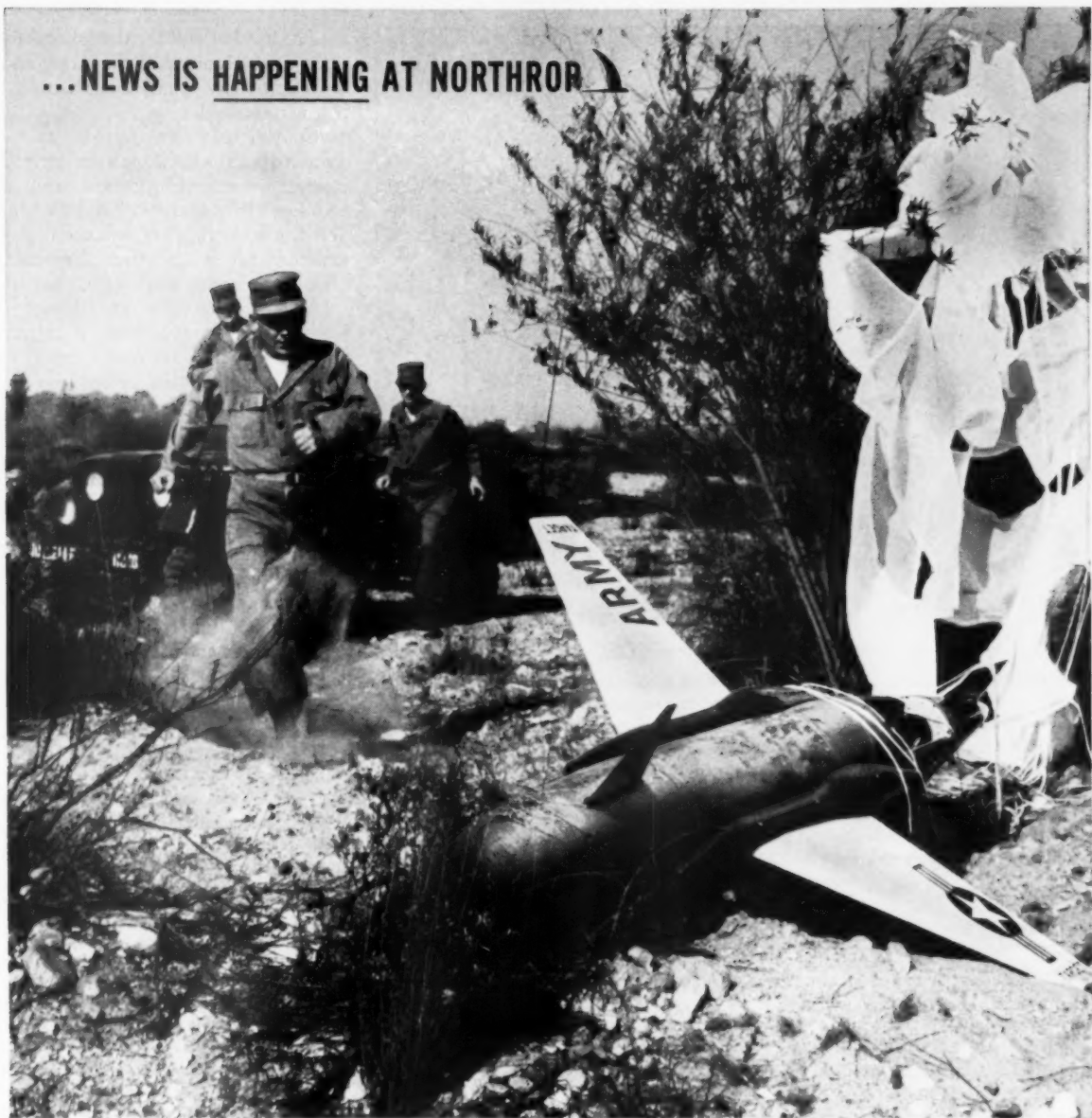
"The physical training knowledge of the majority of officers must be improved. Officers must be required to conduct or supervise physical training programs.

[We] do not advocate that the Army Physical Training School, deactivated in 1953, should be reestablished; [we] do believe that post and division level physical training schools should be created for instruction of officers and key NCOs."

The Infantry School is preparing a series of physical training tests which will give the Army a standard for periodic and mandatory testing. These tests, the School reported, "will not push individuals to the point of exhaustion, but will have established minimum repetitions in each test event. Test measurement will reduce the element of human judgment as to manner of performance, which is so prevalent in the present physical fitness test."

The Infantry Conference considered many other subjects of great importance to the military defense of the nation, but none was more significant than the discussion of the physical fitness of American fighting men. The future of the nation will depend in the final test on the fitness of the infantrymen it produces.

...NEWS IS HAPPENING AT NORTHROP



RADIOPLANE RP-76 SIMULATES NEAR-SONIC ENEMY ...ARMY MISSILEMEN SCORE HIT IN FIRST FIRING!

Place: Red Canyon Range, New Mexico. Time: minutes after an RP-76 high-altitude air-launching by Radioplane personnel. Event: Army missilemen sight RP-76 simulating an enemy weapon system approaching at Mach 0.9. They fire—for the first time against an RP-76—score a direct hit.

Responsible: the men of Battery C, 1st Missile Battalion (Nike-Ajax), 56th Artillery, U.S. Army Defense Command; the men of Radioplane's contractor-operated flight service program, backed by the more than 2,500 Radioplane drone specialists who designed and produced the RP-76.

This Army-Radioplane achievement typifies the result of Radioplane teamwork with all of the U.S. Armed Forces. Other current examples in development: the supersonic USAF-XQ-4A weapon evaluation target drone and the U.S. Navy's XKD4R-1 rocket target, two more members of Radioplane's complete drone family.



RADIOPLANE

VAN NUYS, CALIFORNIA, AND EL PASO, TEXAS
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Ground Fire Tests by CDEC

Vulnerability of low-flying jet aircraft to ground fire is being evaluated by the Army's Combat Development Experimentation Center (CDEC) at Hunter Liggett Military Reservation, Calif., where new concepts and techniques for the nuclear battlefield of the future are being developed. The targets for the ground gunners, who are equipped with various weapons and gun cameras, are Air Force F-100 Sabre Jets and Army T-37 jets. In each phase of the tests, the film is analyzed and factors such as types of weapons used, terrain, altitudes and gunnery positions are evaluated. Formations, speeds and altitudes used by target aircraft will influence tactics in low flying aircraft in the Army of the future. Photo above is a rifleman's view of a F-100 passing at 450 mph over a BAR loaded with camera film. More than 600 missions have been flown "on-the-deck" by jets during the course of the tests.

features of the high-explosive warheads for the Nike Ajax and Hercules are consistent with accepted techniques and practices. For the atomic warheads of the Hercules, the Army was complimented on the very thorough and intelligent approach which has been made to reduce the hazards of accidental nuclear reaction to a remote possibility.

The committee recommended that the existing program of thorough and careful training of personnel be continued with particular emphasis on careful selection of personnel, reduction of turnover, and constant effort to eliminate human errors and personnel failures.

* * *

Press releases are so rarely entertaining as well as informative that the appearance of one is an event. Herewith is one prepared by the Seventh Army's Information Section that heralded the news that the Inspector General's branch was celebrating its 181st birthday. The release purported to be the notes of a PI-reporter who interviewed

the Seventh Army IG—Col. William Massello, Jr.

"Went to inspector general office at Seventh Army headquarters," the reporter wrote. "No trouble getting in. Had expected long lines of petitioners. Office empty except for few pleasant clerks. One immediately took me to Colonel Massello after I denied having any complaint of any kind.

"Colonel's appearance completely refuted IG's own legend. Colonel a stocky, unwrinkled, friendly fellow.

"After sitting down, asked colonel how IG business was. He replied it was normal. Asked him how he liked the job. Turning on a charming smile, he said he thought he had a fine one.

"Colonel explained that the office involved a great deal of work and he enjoyed this. 'There's nothing worse than eight hours of thumb-fiddling.' Went on to outline office's field of operation.

"We, and all other IGs, have the mission to inquire into and report upon matters which pertain to the perform-

ance of mission and the discipline, efficiency and economy of the Army and to perform any other duties required by the commander.'

"Colonel said that in order to accomplish the job, inspectors general conduct investigations, surveys, studies and special inspections. IGs look into unit funds, methods of operation, personnel management matters. Emphasis is on constructive work.

"Asked colonel, after emphasizing I had nothing on my mind, if it was difficult to bring personal matter to IG's attention. Colonel looked stern.

"Leaning across desk, jabbed pencil at me. 'The IG's door is always open. (This is true. Door open when I walked in.) This is a normal policy anywhere.'

"Jabbed pencil at me again. 'However, we find that some complaints could have been handled faster and more efficiently if complainee had gone to his squad leader, first sergeant or company commander.'

"Colonel put pencil down, waved an envelope at me. 'No one has to do this, of course. If there's some reason a man doesn't want to talk to anyone in his unit about his problem, he can go directly to an IG, and he doesn't need anyone's permission, either. Just walk in the door.'

"My pencil broke. Colonel pointed out pencil sharpener, waited until I had a point, then made another one himself. 'Inspectors general and their assistants are impartial, unbiased and have only one overriding interest—the welfare of the entire command they are in.'

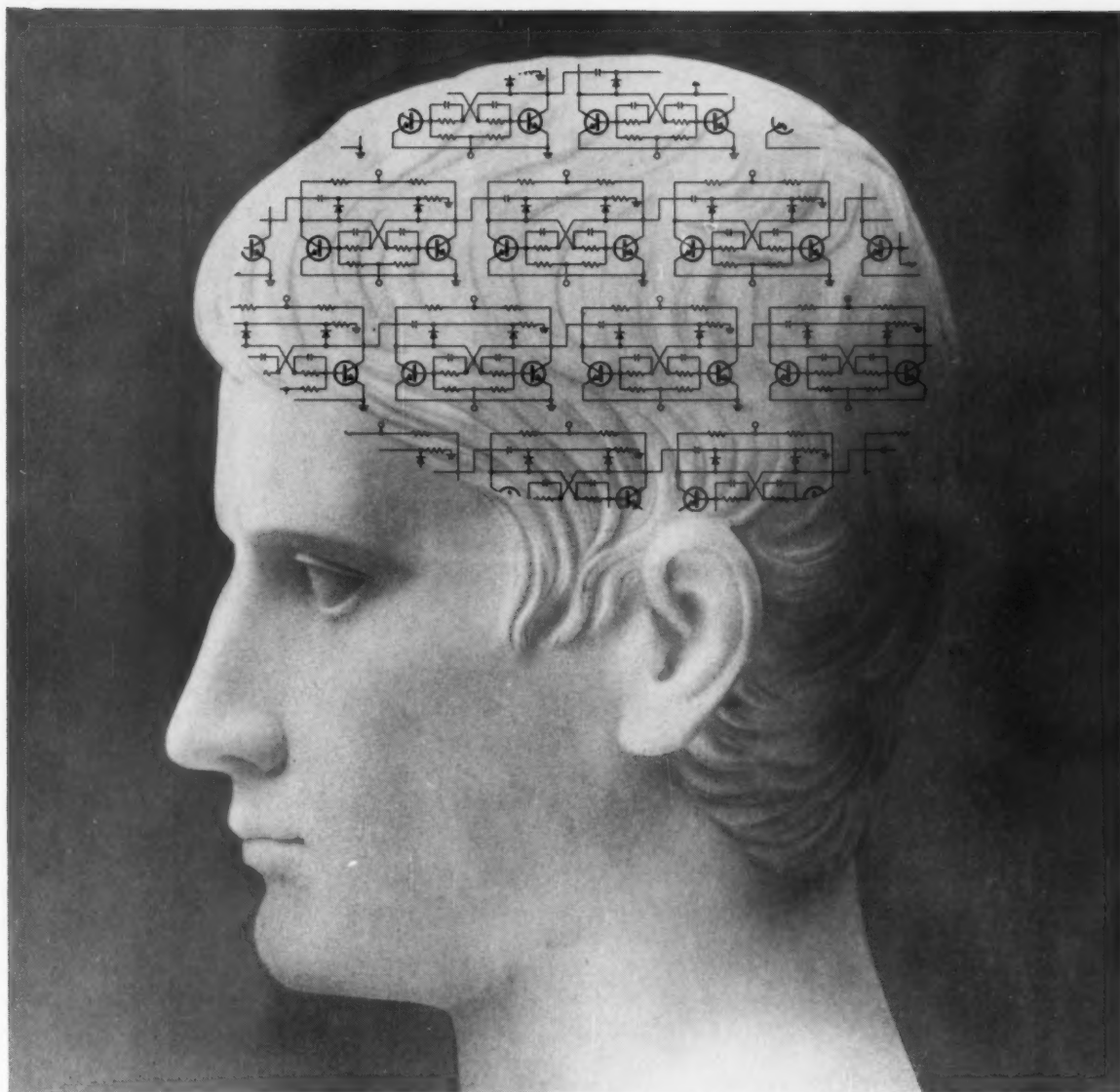
"Colonel began to get restless—large pile of paperwork on his desk. Hurriedly asked him about the IG branch traditions, who important inspectors general had been.

"'Well,' he said, 'Alexander Hamilton was an IG. So was Zebulon Pike, when he wasn't discovering mountains on the side. Major General Albert Piereson is the current U. S. Army Inspector General. Not a mountaineer as far as I know.'

"Asked colonel what the office's anniversary plans were. 'We'll work right on through it,' he said emphatically.

"Got up to leave. Colonel plunged into paper pile, heaved small sigh.

"Friendly clerks in outer office also busy. Man who had taken me to colonel asked if I really didn't want to file a complaint. Reluctantly said no and left."

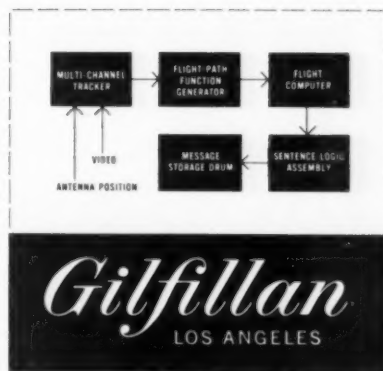


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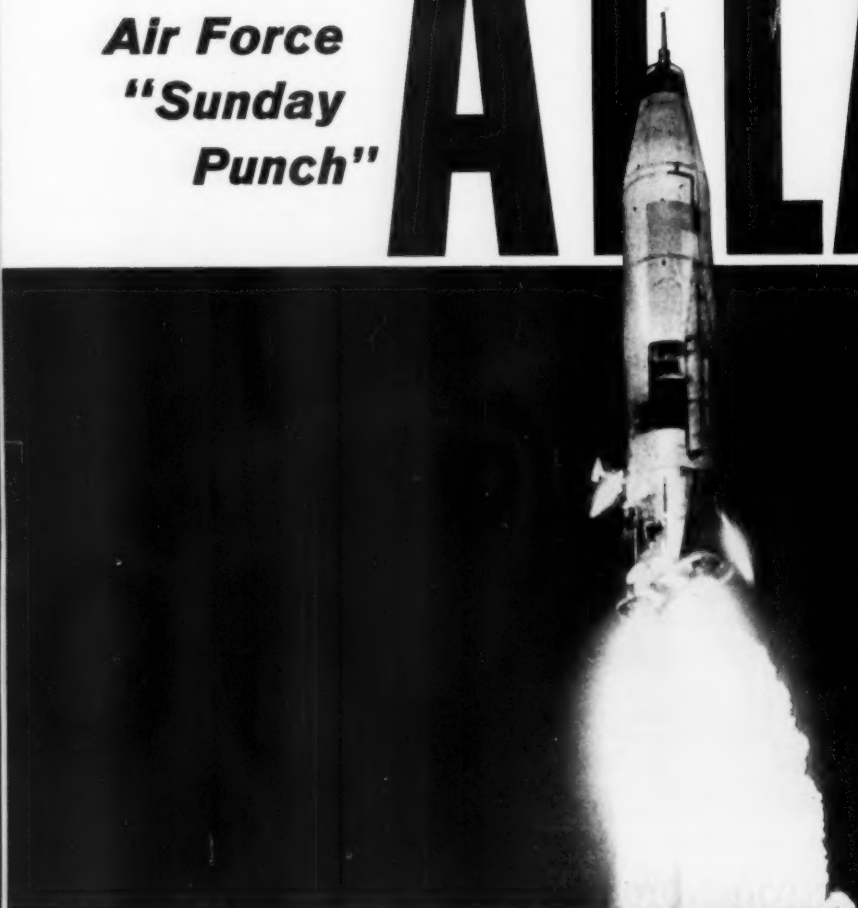


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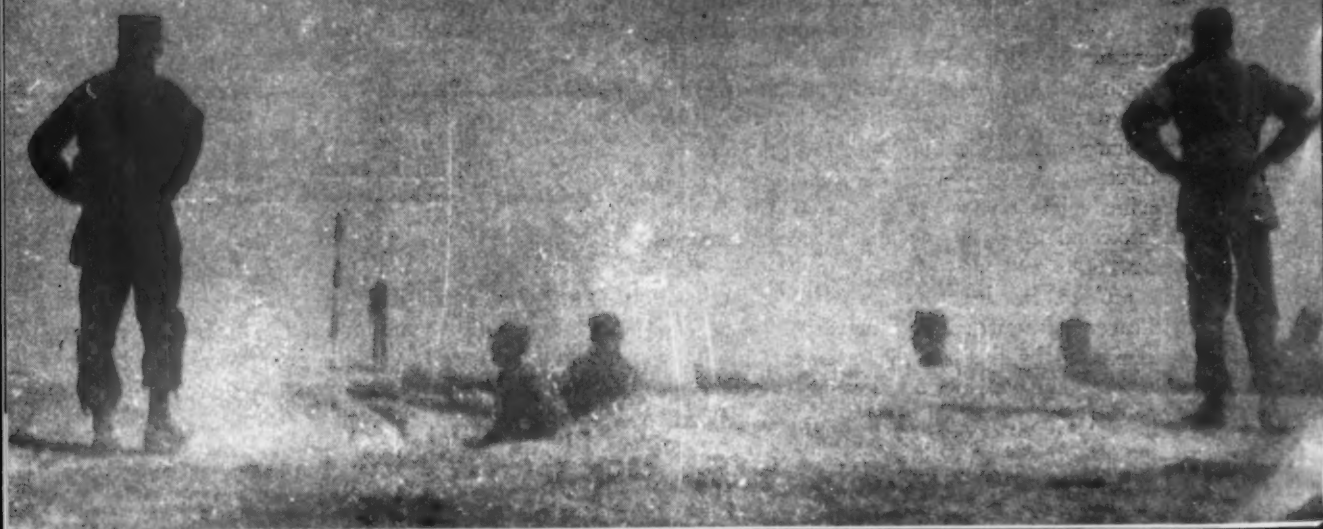
Atomic War Questions for Battle Commanders

Lieutenant Colonel Arthur W. Milberg

IN selecting the size and type of nuclear weapon to use against an enemy target, the trained special-weapons officer normally will estimate the damage he expects from blast or radiation. He does so because the radius damaged by these effects can now be accurately predicted. Also, properly trained troops can almost completely protect themselves and their equipment from damage from heat or flash at ranges beyond the effects of blast and nuclear radiation. However, regardless of which is selected as most effective against a particular target, all four effects will occur. Furthermore, all

four will occur whenever the enemy employs nuclear weapons against us. Therein lie several problems that will harass the commander during an atomic action.

I propose to discuss several problems that are peculiar to the nuclear battlefield because of the effects of atomic weapons. These and similar ones are being analyzed and discussed by students at the Command and General Staff College. I will grant that solution to any problem must depend upon the situation as it exists at the time. However, a little reflection may serve to lessen the im-



pact, and possibly the overemphasis, of these problems as factors to be considered by a future commander in his estimate of the situation.

Can we make night attacks?

Current directives for all types of units increasingly stress training in night operations, because in addition to other reasons, such actions hold great promise of success in the offense. They also restrict the enemy's target-acquisition capabilities. However, in this type of operation, not all is gold that glitters.

During night operations we are concerned not only with the normal problems associated with troop safety and dispersion when atomic weapons are used. The effects of flash blindness, poor night vision, and retinal burns must also be considered. Tomes have been written by physicists and doctors on the effects upon the human eye of nuclear flash. Conclusions vary from complacent to alarmist. Anyone who has witnessed an atomic blast from a foxhole several miles from ground zero, hooded or under blankets, with hands tightly clamped over eyes, will admit to being impressed by the degree of flash which penetrated. At the risk of oversimplification, let's assume certain principles as being average.

The loss of night sight

The eye when adapted to darkness will admit 50 times more light than it can in daylight. Troops within five miles of ground zero whose dark-adapted eyes are open at the time of flash, regardless of the direction they are facing, will be blinded for about 30 minutes. They will need several hours to regain the purple vision needed for effective night sight. It also may be concluded that any other troops within an estimated five to ten miles of GZ who are facing the general direction of the detonation would be similarly affected.

Although night blindness produces no permanent damage, the handicap of temporary sightlessness among attacking or advancing forces can never be accepted. The effects of retinal burns run from partial sight impairment for several hours to permanent blindness. To suffer such burns one must be so situated that the fire-ball image strikes the most sensitive part of the retina. For the image to be picked up by the eye, the observer must directly face the fire ball. This condition of facing the fire ball would obviously be met most frequently by unprotected troops in the attack or by advancing elements.

The problem has been recognized for quite some time. Leavenworth graduates of the years 1954 to 1957 were impressed by the fact that a commander must rigidly restrict the activities of all troops within an ex-

tensive radius of GZ at the time of a nuclear blast at night. Within a "light safe" safety line, his troops must have the additional protection afforded by goggles, sunglasses, blindfolds, or covered foxholes.

So much for *our* use of nuclear weapons. Let's go a step farther.

When the enemy blinds you

The enemy is not going to tell us when and where he will place a nuclear burst. Visualize yourself as commanding a division committed in a night attack against an enemy who has plenty of atomic weapons. When the enemy realizes your night attack is hurting him, he (considering blast, nuclear and heat effects only as a bonus) employs a single blast against your attack for the disorganization its flash will create by blinding your exposed and moving troops. This disorganization will extend in varying degrees to a diameter of 20 miles.

How will your blinded troops maintain direction and control? Can you provide some means of preventing flash blindness, which will still permit control of a night attack?

Dark or opaque glasses won't do, because even while wearing them the troops couldn't see well enough to move about in the dark. Covering one eye is a preventive measure of doubtful value. Such action affects depth perception and enlarges the problems of estimating ranges and avoiding obstacles, holes or ravines. Should you decide to break off the attack, how will your troops see to find their way back to their old position, or to organize the ground they have taken? Will you blindfold every third or fourth man in each squad to insure that "seeing eyes" will be able to lead the sightless?

Will the enemy's use of nuclear weapons create obstacles from tree blowdown and other debris that increase difficulties of control and movement?

Will the enemy's or our own nuclear fires alter the appearance of terrain features we have selected to facilitate control?

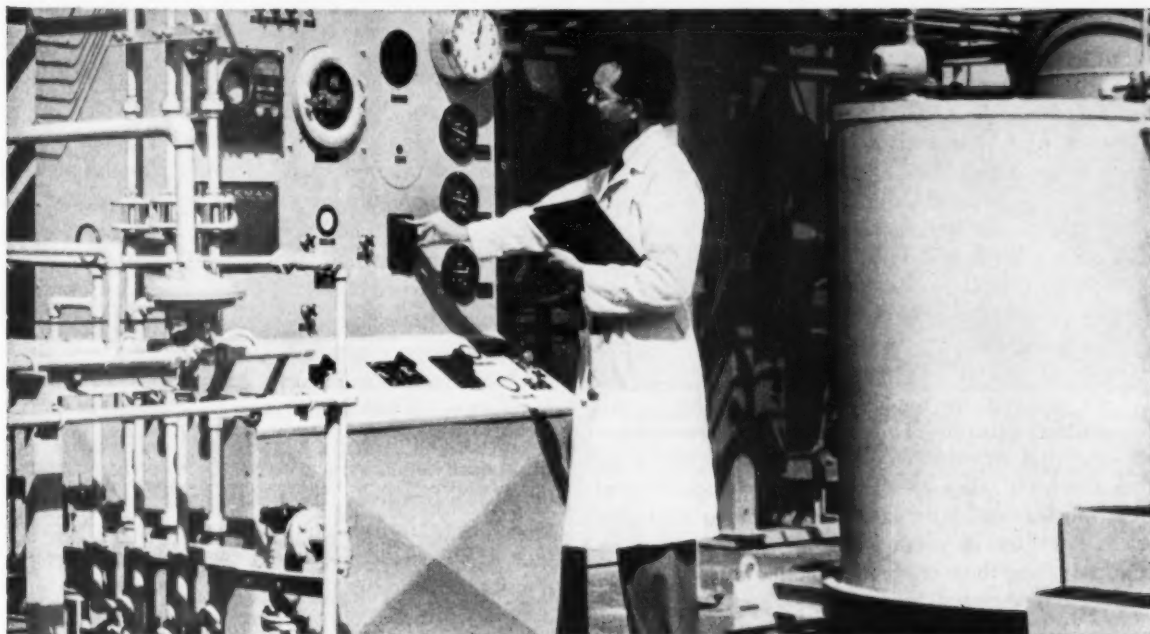
When one considers the problem deeply, he wonders: Is the night attack feasible during an atomic action?

What do we do with victims of fallout who are doomed to die?

That mysterious and often frightening phenomenon—nuclear radiation—raises several highly debatable problems. Though they are unpleasant, these problems can and will exist, and we gain nothing by playing ostrich. Again, admittedly, each solution will vary according

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to weights given other factors affecting the situation, but the problems should be recognized early in order to strip them of surprise when and if they arise.

The effects of radiation upon the human body vary, depending mainly on the dosage to which it is exposed. Heavy doses kill in a very short time, if not instantly. Very small doses can be absorbed regularly with little or no appreciable effect. We absorb radiation energy from the sun daily. Cancer patients get fairly heavy doses. Our problem lies between these extremes. We know that a certain amount (here let's call it x roentgens) of exposure to radiation may or may not produce illness for a few hours. The victim apparently recovers, only to die several weeks later after another short but sudden period of illness.

The living doomed

Let's say you are the division commander in this hypothetical situation. The enemy has fired a nuclear strike against elements of your division. Corrective action has been taken to restore the situation. Normal blast, nuclear and burn casualties are being treated or evacuated. One of your commanders reports that his film badge and those of about 250 other members of his battle group show exposure to the x roentgens we mentioned. This means that these men represent a group of soldiers who are able-bodied at the moment, and who will be for 15 to 20 days more. But after 20 to 25 days they will all be dead. Let's call on that old service school requirement: What are your actions and orders at this time?

Will you evacuate these troops as casualties even though they are now physically unimpaired and are able to walk?

Will you make special arrangements for their speedy evacuation to the zone of the interior so that they may spend their last days with loved ones?

If evacuation to the ZI is not practicable, or not desired by the doomed troops, will you send them to leave centers so they can live it up for their remaining days?

If, in your opinion, your situation was so tenuous that it required the application of every possible combat means, would you be justified in requiring these men to continue serving in their parent units? Or would you organize a kamikaze or banzai type of unit from among the doomed, for executing especially hazardous missions?

Lieutenant Colonel Arthur W. Milberg, *Corps of Engineers*, entered the Army in 1941 and during World War II was executive and commander of an engineer combat battalion in VII Corps in Europe. He has had two tours in Germany, one as deputy port engineer at Bremerhaven POE and one as engineer and G3 of the 4th Infantry Division. For the past four years he has been an instructor at the Command and General Staff College.

Will we order a unit to attack through a dangerously radioactive area?

Early in your study of the effects of nuclear weapons, you learned that neutrons released by fission induce radioactivity in the area around ground zero. The size of this area varies according to the yield of the weapon and its burst height. Normally, the area of dangerous radioactivity is smaller than the area where casualties and damage from other effects occur. However, the presence of animal life in this area of induced radioactivity must be carefully controlled to avoid exposure to crippling or killing doses of radiation.

One obvious solution is to avoid the use of nuclear weapons on targets which must be occupied or crossed on foot by our troops. This will not always be practicable near targets which cannot be effectively reduced by nuclear-free fires. Another frequently advocated approach is to displace ground zeros so we get some degree of destruction on the target but avoid creating physical or radiological obstacles in the area to be seized or crossed. Such measures require very careful and detailed coordination of the maneuver and atomic-fire plans. Today's problems at service schools are designed to provide students considerable practice in the coordination required.

Another solution to the problem of target areas which must be crossed but not occupied, is to provide motorized or mechanized elements for rapidly traversing the radioactive area.

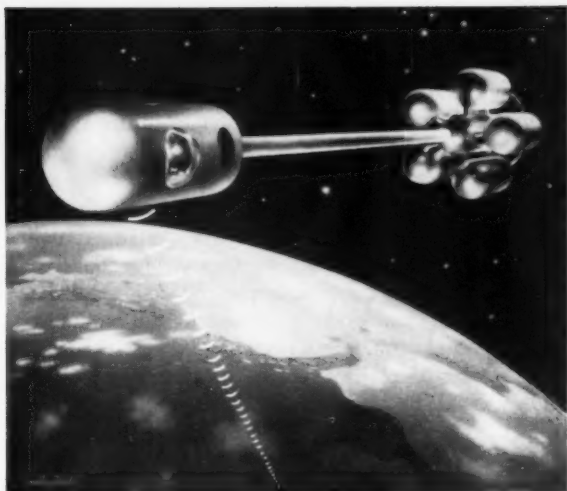
But the best-laid plans of mice and men often go wrong. Something may happen to slow or stop our motorized or mechanized forces within the radioactive area that threatens to produce excessive casualties. Due to variations from planned yields, ground zeros, or heights of bursts, radioactive hotspots may be larger, more intense, or at locations different from those anticipated.

What happens to your unit, maneuvering as directed, when it encounters dangerous and unpredicted degrees of radiation? Does it go on or does it turn back? In this circumstance, is the decision made by the commander of the affected element, or is the accomplishment of his mission so important to the unit as a whole that the decision must rest with the next higher commander?

Simple reflection on the problem establishes these obvious requirements: an adequate family of radioactivity detection, identification and computation instruments; reliable, superior communications; more specific command guidance to subordinate units whose actions in such a situation might adversely affect the success of the command as a whole.



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Acceptance of casualties

It long has been recognized that the over-all situation may cause a commander to accept a risk of casualties in a portion of his unit in order to insure success of the entire operation. For example, a battle group might be directed to move through a radioactive area in order to seize an objective which is vital to the success of a division's attack. The risk of casualties might be unacceptable to the battle-group commander who must make his own decision, but might well be justified in the division commander's estimate by the promise of reduced casualties in the whole division. At this stage it can be presumed that commanders during an atomic action will be (more frequently than was the case with their nuclear-free predecessors) thrust into situations requiring enough moral courage to require acceptance of casualties in a portion of their units in the interest of the whole command.

This proposition, however, requires a little deeper thought in order to insure that the commander of the future is best prepared to meet the demands of his complex responsibilities. In the past, when allotting units to main and secondary attacks, a commander could consider such tangibles as dispositions, personnel and equipment strengths, weather, terrain, enemy dispositions and capabilities, and such intangibles as morale and esprit. Today's commander must consider a new and important factor: nuclear radiation.

The human body has certain tolerance limits which allow absorption of radioactivity without rendering it ineffective. This tolerance limit varies considerably, depending mainly upon state of health, quantity of radiation absorbed, and period over which the radiation is absorbed. The monitoring of personal film badges and radiological exposure records creates an entirely new field for medical and personnel specialists, and ultimately for commanders. Presumably, each person who has absorbed or almost absorbed his tolerance limit must at least be transferred to where the probability of exposure to additional radiological hazards is lessened or minimized. It is not improbable that all the troops in a company or even a battle group may approach this tolerance level simultaneously.

Alternate plans

A little reflection elicits more problems for the commander. Obviously, when allotting his units, he must consider assigning subordinate outfits with the highest radiological exposure record to missions he knows will entail the minimum hazard of additional exposure. However, the execution may not follow his plan. What if our unit, already exposed to near the danger point in cumulative dosages, encounters dangerous and unpredicted degrees of radiation? A fresh, uncontaminated unit might be ordered through the hotspots, and suffer casualties numbered only in dozens, with most of those merely rendered ineffective rather than killed. Exposure of our heavily dosed unit might result in hundreds of deaths.

We have already mentioned the requirements of sufficient professional judgment and moral courage to insure the success of the unit as a whole. Doesn't our new problem point up the necessity for alternate plans? Will not the necessity for alternate plans become greater the longer we are committed to combat, and the larger our cumulative doses have become?

Can we cross a radioactive river?

As has been indicated, the capabilities of nuclear fallout for direct use on targets, or to deny areas, contain many imponderables. Let's lift the veil on a small aspect of this and see if our ideas regarding river crossings require some revision.

The size of areas which may be contaminated by surface bursts varies according to yields, cleanliness, wind speed and direction, and the like. It appears logical that an enemy defending a river obstacle can select a combination of these factors which would achieve an unacceptably high degree of radiation for four or five miles downstream from GZ. This assumption recognizes that the water itself can be expected to carry downstream considerable, but difficult to predict, amounts of radiation from a burst on or near the surface of the river. Several blasts so employed could place a radiation barrier across a division's entire crossing front. Repeated blasts at appropriate intervals could maintain a dangerous degree of contamination.

Yet nearly all our problems admit the necessity for ferries or bridges for crossing tanks and other heavy vehicles. Have we a Superman who can live in this contamination long enough to construct and operate the needed ferries or bridges?

Have we devised bridging equipment which can be assembled rapidly enough to permit construction within allowable "stay times" in the contaminated areas, or must our solution to this problem be in a different approach? Most of our combat gear can be moved across a river in aircraft or amphibian vehicles with little or no delay at the river line. Tanks and other very heavy vehicles continue to be the millstones around our necks. Should not our approach be the lightening of tanks and very heavy vehicles to the point where they can be designed as amphibians or floated across by the addition of some simple pneumatic apparatus?

THESE are just a few of the many aspects of nuclear warfare that we have vague or no answers to today. Perhaps the answers must await the test of battle. Perhaps, however, by provoking a little thought along these lines before we attempt to pierce the fog of war, we may better qualify commanders of the future for their jobs on the nuclear battlefield.

The Genesis of Monty's Master Plan

A military historian's search of the sources throws some light on the controversy over the Normandy breakout

CAPTAIN MARTIN BLUMENSON

THE publication of Field Marshal Montgomery's memoirs [reviewed in our December issue] has revived interest in some World War II controversies that are still being debated. Unfortunately, these memoirs throw little new light on these issues, which have undergone considerable scrutiny since the end of the war.

The most consistent thread running through his memoirs is the claim to have been aware of nearly every contingency in advance, to have been absolutely correct from the very start. Having alone foreseen the dangers as well as the opportunities of the campaign, therefore, he alone could plan to meet them.

One of the most controversial aspects of Montgomery's generalship concerns his role in the Normandy breakout. According to his memoirs, Montgomery figured out far in advance what was about to happen and then conceived and unswervingly followed a master plan.

"My master plan for the land battle in Normandy," he says, "was to draw the main enemy strength on to the British front on our eastern flank in order that we might the more easily break out on the western flank with the

First American Army. I never once had cause or reason to alter my master plan. There was never at any time any intention of making the breakout from the bridgehead on the eastern flank."

Such a positive statement, by its very nature, is suspect. A battle or a campaign never goes the way it is planned. Nor does a capable military planner draw up a rigid concept; rather, he tries to remain flexible, ready to take advantage of developments as they unfold.

Despite Montgomery's conviction that *his* way is the way it nevertheless happened, investigation of the records proves that the actuality was different from—and somewhat more complicated than—he would have posterity believe. These records—papers, letters, and documents that were prepared at the time the events transpired—do not always support Montgomery's reminiscences.

Exactly what was the master plan he speaks of? Was it the one drawn up before the invasion, by his 21 Army Group headquarters? Was it a scheme he hatched in his own mind? Or is it his *post facto* explanation of events?

Before Montgomery became associated with the preparations for the Allied reentry into Europe by way of northwest France, a plan named Overlord had been completed as the grand design for the invasion. When in December 1943 General Eisenhower was named to head the invasion forces and General Montgomery was designated commander of 21 Army Group under him, the Supreme Commander directed his subordinate land, sea, and air headquarters to revise the Overlord plan.

As the commander of the land forces during the initial operations on the Continent, Montgomery was responsible for getting the ground forces ashore. The plan, drawn by Montgomery and his 21 Army Group staff, concentrated on the landings, the most difficult part of the invasion. Beyond that, the Overlord concept remained generally in force: The Allies would overrun and seize a lodgment area bounded by the Seine, Eure and Loire rivers in northwest France and there prepare the final thrust toward the heart of Germany.

Neither the Overlord plan nor the 21 Army Group plan mentioned a breakout from the beachhead. Quite the contrary, operations were visualized as developing

Did the Supreme Commander and his chief battle leader see "eye to eye on the big problems"?



Captain Martin Blumenson, Staff Specialist, USAR, an occasional contributor, wrote *Breakout and Pursuit*, a forthcoming volume in the U. S. Army's official history of World War II, was Historical Officer for Third and Seventh Armies and later for ETO, commanded the 3d Historical Detachment in Korea, and was Historian of Joint Task Force 7. He is now a civilian in the Office of the Chief of Military History.

gradually through a series of dated phase lines to the edge of the lodgment area. From the invasion beaches the British were to thrust generally southeast in order to cover American operations to the south. The planners dared not go beyond that outline. No one could foresee how the operations would actually develop, and no one favored a rigid plan that more than likely would not be consistent with reality.

It seems clear, then, that Montgomery's master plan was not the same as the one prepared by 21 Army Group. Was it a personal scheme of his own?

The terrain

The Allies landed the British on the left (east) and the Americans on the right (west) in order to facilitate supply operations during later stages of the invasion. Eventually, reinforcements and matériel for the American forces would come directly from the United States through ports in Brittany; for the British, they would come from England through the Channel ports.

This disposition of forces placed the U. S. troops in the hedgerow country of the Cotentin peninsula—terrain over which mechanized forces could initiate and sustain offensive operations only with the greatest difficulty. The British, on the other hand, faced the Caen plain, a relatively flat region suitable not only for armored operations but also for the construction of airfields.

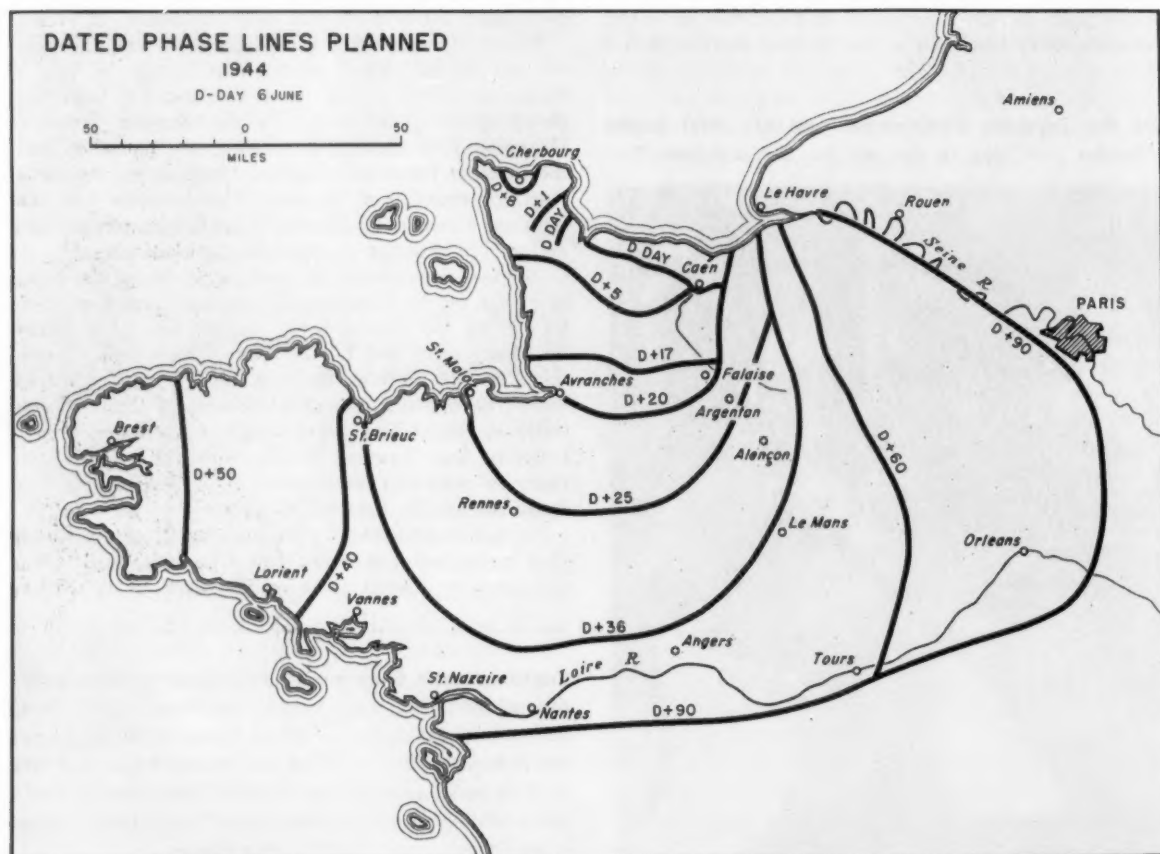
The terrain itself offered a logical pattern for the development of operations. The pre-invasion planners doubted that the Americans could effectively conduct an offensive in the hedgerows against a strongly established and resourceful enemy. Since the Caen plain leads naturally toward the Seine River and Paris, they looked for the British to progress on the eastern flank—through Caen.

Would not the enemy see this too? Certainly. But the Allies could count on their complete command of the air and their great superiority in mobility and firepower on the ground. If applied with decisive force on favorable terrain, Allied strength must overpower the Germans. On the basis of these premises, Caen was designated an objective to be secured on D-day, 6 June 1944.

Had Montgomery read his crystal ball correctly, he would have objected to thus designating Caen. He was destined not to secure all of Caen until more than a month later, and then only after three strenuous efforts.

German possession of Caen denied to the Allies ground for mobile operations and airfield sites. It also rendered them vulnerable to a German thrust to the sea that would have split the beachhead and imperilled the invasion effort. To some Allied observers, failure to take Caen seemed dramatic and irrefutable evidence of hesitation and excessive caution on Montgomery's part—a caution attributable, at least in part, to the fact that the British, with their limited manpower, could not afford heavy casualties.

PRE-D-DAY PLANS FOR THE DEVELOPING BATTLE FOR FRANCE



Though seemingly untroubled by his failure to take Caen, Montgomery wanted the city and tried to secure it. He scheduled an attack on Caen for 18 June, but had to postpone it until the 25th.

Intimations of the master plan

While his troops were attacking toward the city on 25 June, in a letter to the Supreme Commander General Montgomery put in writing for the first time what he was later to call his master plan.

In this letter he expressed the belief that for him, the most important task was to avoid "setbacks and reverses," particularly since the Germans had massed the bulk of their armor in front of the British zone of operations. From this estimate emerged a corollary. Since he could not, apparently, move through Caen, he reasoned that if he could "pull the enemy on to the [British] Second Army," he would thereby facilitate American advances on their part of the front.

It would seem that the purpose of this letter was, at least partially, an attempt to rationalize and justify in advance his probable failure to capture Caen on 25 June. As it turned out, the Germans held onto the city.

General Eisenhower, in replying that day, accepted the idea. He expressed the hope that the Americans could launch an attack in the Cotentin "while you [Montgomery] have got the enemy by the throat on the east."

Both men were harking back to the Overlord concept: the British movement southeast through Caen to cover American advances south toward the entrance to Brittany.

But if Montgomery's intention, according to his "master plan," was not motivated by a desire to seize Caen, his determined efforts to take that town obscured it. Even General Eisenhower seemed bewildered, misled because Montgomery had informed him that the offensive launched on 25 June was to be a "blitz attack."

Furthermore, if Montgomery had planned from the first only to attract the bulk of the German forces in Normandy to the British front, and if therefore the capture of Caen had become impractical, it is more than likely that he would not have been quite so amenable to retaining Caen as a D-day objective in the plan by his own 21 Army Group.

Far more to the point, the Germans massed the bulk of their combat power without regard to the intentions Montgomery enunciated on 25 June. From the beginning they assembled and used their tanks in the Caen area because that terrain was the most advantageous for employing them and because tactical doctrine dictated an armored counter-blow as the best means of defeating the invasion.

Whatever General Montgomery's intent—and his intent was not clear at the time to other Allied commanders, and in particular to his superior, General Eisenhower—the British seemed stalled before Caen. It therefore devolved upon the Americans to launch a major attack in the hedgerows, through terrain ideally favoring the defense.

The Americans attacked on 3 July, but strong and skillful resistance in the Cotentin frustrated the Americans and prevented rapid advance.

A worried Ike and a happy Monty

Troubled by the "slow and laborious" U. S. advance, Eisenhower on 7 July underscored the still unfulfilled and urgent needs: maneuver room, additional ports and air-



"This thing has got to be bold," said the author of Cobra as he explained his breakout plans

field sites, open country "where our present superiority can be used." He confessed he was worried by the shallowness of the British zone, where one of the invasion beaches—across which more men and supplies were coming to bolster the beachhead forces—was still under enemy artillery fire. He went so far as to question whether Montgomery, in his professed zeal to attract enemy forces to his front and away from the Americans, was making sufficient effort to expand the British part of the beachhead. "We must use all possible energy in a determined effort," General Eisenhower wrote, "to prevent a stalemate" and the necessity of "fighting a major defensive battle with the slight depth we now have."

"I am, myself, quite happy about the situation," General Montgomery replied. He had set into motion "a very definite plan." And he advised Eisenhower, "Of one thing you can be quite sure, there will be no stalemate."

Montgomery's confidence stemmed in part from a new effort being mounted to capture Caen. This one was to employ strategic heavy bombers in direct support of ground troops—an unusual use of such aircraft. During the evening of 7 July, 460 planes of the RAF Bomber Command dropped 2,300 tons of high explosive in forty minutes, a saturation bombardment of a rectangular target on the northern outskirts of Caen. Early next morning British troops attacked, and on 9 July they entered Caen and advanced to the Orne River, which flows through the city. Montgomery had thus secured half of Caen.

Despite Montgomery's assurance that there would be no stalemate, the very slow and painful progress being made by American troops in the Cotentin and the rather disappointing advance by the British raised the specter of a bogged-down beachhead. The divergence between

the expected expansion according to pre-invasion plans and the actual extent of the beachhead in early July seemed to indicate that perhaps a standoff had been reached. With disturbing remembrance of static trench warfare of World War I, SHAEF planners began to consider how the apparently stabilized front might be dissolved and increased maneuver room attained.

The SHAEF staff considered numerous ideas on launching amphibious and airborne operations that would add impetus to expansion of the beachhead. All were rejected. They were, in General Eisenhower's words, "sideshow excursions." More promising was a suggestion by General Omar N. Bradley, commander of the American forces.

'Take your time, Bradley'

Troubled by the slow progress of his attacking forces in the Cotentin, General Bradley expressed his concern to Montgomery during a meeting with him on 10 July. "Take all the time you need," Montgomery told Bradley. Montgomery would assist by continuing to attempt to draw the German strength away from the American zone.

Bradley also indicated that he was thinking of a new operation in the Cotentin. This, like the attack on Caen, would marshal airpower in support of a massive ground attack on a very narrow front. He had not yet completely formulated a precise operational concept.

By 12 July General Bradley's idea had crystallized to

the point where he could present it to his principal subordinates. His introductory words set the tone of his thought: "This thing has got to be bold." Having refined his concept by discussion, Bradley issued his outline plan, code-named Cobra, on the following day, 13 July.

Meanwhile, a similar development was taking place on the British side. Lieutenant General Sir Myles C. Dempsey, commander of British Second Army, who had attended the conference with Montgomery on 10 July, immediately afterward suggested to Montgomery that the British might take a more positive role in the campaign. They might launch a strong attack of their own to break through.

Montgomery's immediate reaction was negative. Later that day, however, he found the idea attractive enough to order Dempsey to start planning for a "massive stroke" to be made across the Orne River from Caen toward Falaise, 20 miles away. By 13 July, Dempsey had assembled a corps of three armored divisions in reserve for the massive stroke, and had formulated a plan (Goodwood).

Like Cobra, Goodwood was to have heavy air support. Because the air forces could not support two such attacks in the strength desired, neither simultaneously nor even on successive days, it became necessary to set the dates of execution at least two days apart. Bradley had originally chosen 18 July as the date for Cobra, but his slow advance in the Cotentin caused him to postpone it for a day. Montgomery selected 17 July for Goodwood, but weather and

THE OPERATIONS AS THEY ACTUALLY DEVELOPED



the need for extensive regrouping on the British front caused delay. As finally decided, Goodwood was to be launched on the 18th, Cobra three days later.

Left hook, right cross

While launching dates were being debated, General Montgomery became increasingly intrigued by the idea of attempting a breakthrough with Goodwood. Then he began to see Goodwood and Cobra as equal parts of a dual breakthrough effort: destructive blows against the Germans, Goodwood a left hook, Cobra a right cross. Whether his primary intention was to launch Goodwood to aid Cobra and his secondary intention was to achieve a breakthrough with Goodwood alone, or whether the reverse was true, is not clear from the records.

The immediate objective to be gained by the forces executing Goodwood was the plain southeast of Caen, rolling terrain rising toward Falaise. Though neither Montgomery nor Dempsey mentioned Falaise specifically in their written orders, they and other commanders were thinking of Falaise and even of Argentan—15 miles beyond Falaise—as objectives perhaps quickly attainable if the battle developed favorably. Such an advance would achieve not only a breakthrough of major proportions but also a complete dissolution of any potential stalemate.

This was the implicit promise, for General Montgomery assured Eisenhower that his "whole eastern flank" would "burst into flames." He requested the "whole weight of air power" to bring about a "decisive" victory.

General Eisenhower was enthusiastic, "pepped up" concerning the promise of this plan. The air forces promised "full out" support for this "far-reaching and decisive plan."

On 18 July, the largest concentration of heavy bombers ever utilized in direct support of a single ground attack loosed its explosives near Caen. Nearly 1,700 strategic bombers, augmented by almost 400 medium and fighter bombers, dropped more than 8,000 tons of bombs to open a path for the British ground forces launching Goodwood.

That afternoon Montgomery reported to Eisenhower that he was "very well satisfied" to have caught the enemy off balance. The effect of the air support seemed "decisive." British Second Army had three armored divisions operating in the open country southeast of Caen, and armored cars and tanks, he thought, already threatened Falaise.

Left hook falls short

Two days later Montgomery judged the purpose of the attack accomplished. British troops had advanced not quite six miles beyond Caen, and had taken 2,000 prisoners. He therefore halted the offensive.

Those who had expected Operation Goodwood to achieve a decisive breakthrough and exploitation were terribly disappointed. General Eisenhower had looked for much more than was accomplished. At SHAEF there was feeling that Montgomery had not pushed as hard as he might have. "The slowness of the battle," General Eisenhower's diarist recorded, "[and] inward but generally unspoken criticism of Monty for being so cautious" made Eisenhower gloomy. Some critics pointed out that Montgomery had gained less than a mile for each ton of bombs. Gossip speculated on "who would succeed Monty if sacked."

Later, in his book, *Normandy to the Baltic*, Montgomery tried to explain why "a number of misunderstandings" had arisen. He had been concerned, he said, only with

"a battle of position," a preliminary operation designed to aid the projected Cobra attack. Because Goodwood was nevertheless a major operation, it had suggested "wider implications than in fact it had."

His orders having been cautious, Montgomery could claim he had no thought of breakthrough, merely hope of making a threat toward Falaise to keep the enemy occupied. Yet the weight of the bombardment and his acceptance of reports that spearheads were threatening Falaise on the first day make it obvious that he had tried for one.

The important significance, apart from the fact that a breakthrough was not achieved, is the fact that he had misled his superior. General Eisenhower had interpreted Montgomery's Goodwood intentions as the promise of a plunge deep into the enemy's vitals. "I would not be at all surprised," he had written Montgomery on 14 July, "to see you gaining a victory that will make some of the 'old classics' look like a skirmish between patrols."

Right cross lands hard

Eisenhower's disappointment at the end of Goodwood led him to write Montgomery to make sure they saw "eye to eye on the big problems." He admitted he had been "extremely hopeful and optimistic" that Goodwood, "assisted by tremendous air attack," would have a decisive effect on the battle for Normandy. "That did not come about," he wrote, and as a result, he was "pinning our immediate hopes on Bradley's attack."

In this he was not disappointed. Postponed by bad weather until 25 July, the Cobra attack penetrated the defenses in the Cotentin. Despite the continuing hindrance of hedgerows, Bradley exploited the breakthrough into a gain of 30 miles—a breakout achieved in one week.

If this was Montgomery's master plan, he must have been standing next to God Himself when he conceived it. For two things are true beyond the shadow of a doubt:

- Montgomery revealed no master plan until 25 June, when the Germans had already concentrated their forces before the British; not because Montgomery attracted them and held them there but because terrain and tactical doctrine dictated such action.
- The initiative for and conception of the Cobra breakout came from Bradley alone, and this sparked Goodwood and its ambiguous intentions.

This is not to say that Montgomery deserves no credit at all. On the contrary, he displayed remarkable aptitude in adjusting to and meeting realities. Finding the bulk of German armor massed before the British and unwilling to risk heavy losses to break through their defenses, Montgomery prevented the Germans from counterattacking. Furthermore, he formulated on 25 June what in fact became the basic pattern of the Normandy breakout. Yet there is no doubt that Montgomery would have deviated from that pattern—had he been able, without incurring heavy losses, to take Caen earlier and to make the breakout on the British flank.

To Montgomery's credit is due a brilliant expediency that he formulated out of the experience of the campaign. Despite his conviction to the contrary, he was flexible. This is honor and glory enough. That he obscured his intentions instead of revealing them clearly and frankly to his superior and that now he claims omniscience from the very start—these detract from the reputation of one of the great leaders of World War II.



CURRENT tactical planning, recognizing the danger inherent in massed forces, visualizes defense of a front by a series of widely scattered battle groups holding critical points. With only reconnaissance forces connecting these "defense islands," it accepts the fact that an attacker, in such a situation, can penetrate the defender's lines at will. If the attacker concentrates the forces required to seize the area held by a battle group, he offers a tempting nuclear target. If he bypasses several battle groups, they will sever his logistical tail. If he does not concentrate, our defending battle groups and mobile striking forces can destroy him piecemeal.

These principles are all very nice if you're fighting a classroom war. Very different interests concern the

strength rifle company. It has one load of ammunition, one complete C ration per man, and enough water and POL for one day's operations. To make things simpler, let's assume his aid men, with full kits, are present.

When we come on the scene, we find Captain Bravo's company is dug in on fairly defensible terrain: sufficiently wooded to the front (east) to impede but not stop armor; but on his flanks and in his rear are many good tank approaches. His parent battle group's main force to the south has just been hit by a nuclear blast. No apparent combat-effective forces survive. The ground appears to be too radioactive initially for safe entry. Tree blowdown bars vehicles from the area of the strike. Enemy armor has cut off his company to the



CAPTAIN FRANK R. P. BENSON

CAPTAIN BRAVO FIGHTS ON

commander whose unit is bypassed during the early period of confusion following an atomic strike. It is highly probable that in any future war many units will be cut off from their next higher commander, or will be the only combat-effective remnants of nuclear-blasted battle groups.

What practical actions are open to an isolated company commander? What actions might his surviving next higher commander take?

Let's examine the plight of Captain Bravo's full-

Captain Frank R. P. Benson, Infantry, is a training officer in the G3 Section, USATC (Infantry), at Fort Jackson, S. C. Commissioned from OCS in 1942, he served with the 63d Infantry (6th Infantry Division) in New Guinea and Luzon, and was recalled to active duty in 1951 for service in Korea.

north and west. So far, no activity has been detected to the front, where the ground gets steadily worse for armor. The frequencies of the parent battle group as well as those of the supporting artillery are either silent or jammed. No telephone lines outside the company are in service.

The commander must act

Captain Bravo, as surviving senior commander, inherits responsibility for the battle group's mission. No doubt a normal mission would include denying the occupied critical terrain to the enemy. He should rightly assume that radioactivity and the debris of battle have already effectively accomplished that portion of his mission, so he now considers other sources of action.

He can sit on his tail until the enemy polices him up, or he can wait for counterattacking friendly forces to link up with him. Such courses, by their inaction, produce nothing constructive, and for that reason alone should be dismissed.

Captain Bravo can attempt to join the nearest friendly unit—hoping he can successfully cross the enemy's line of advance. While the aim of this course is highly desirable, it has to be rejected in this instance. We've loaded the problem against the practicability of this choice.

He can remain where he is and use his location as a base from which to carry the fight to the enemy. While this course has merit, remember the many armor approaches to his flank and rear. Besides, the enemy probably has this area pinpointed and intends to saturate it soon.

A fourth course would be to move into an area that is less suited to armor, and from there continue active tactical existence. But where can he go? How will he get there? What is he going to take?

If Captain Bravo has been properly trained to habitually plan for such eventualities and has had practical work during field problems, he will know what to do. He will already have selected an alternative position that offers good defensive features, and which is close enough to reach in a four- to five-hour foot march, has good cover, and is near a water supply.

While selecting possible sites, Captain Bravo would have included vehicles and their routes in his calculations. Even with all the transportation we've allotted him, he must ignore any plan that contemplates extensive use of vehicles, though he would take his company vehicles as far as the route allows.

When he considers the gear he will take, Captain Bravo must also decide what to do about abandoned equipment and supplies. Since his initial move, at least, must be relatively short, does he bury these supplies and equipment or somehow conceal them? Anything not taken or hidden must be destroyed. The first article contributing to survival being food, that forms the major part of his load. Next come medical supplies, small arms and ammunition, radios and batteries, pioneer equipment, and crew-served weapons and their ammunition.

Climate and terrain have a considerable effect on priority. In arctic areas during late fall or early winter, bed rolls might have the same priority as food. In southern climates men can easily survive with no blankets during the summer. Steep hills or deep swamps slow down the movement of hand-carried crew-served weapons, and the terrain's trafficability affects the choice between number of weapons and amount of ammunition.

Sound-powered telephones, and wire, are highly desirable, but like everything else, quantities are governed by the transportation available. Several portable FM radios must go along to provide the only possible two-way communication with Army aircraft which

Captain Bravo hopes will be searching for him during the next few days.

Remember the mission

Captain Bravo's company is now established in its new location. It is well dispersed in an easily defended area with excellent cover and a good water supply. With his house in order, radio-listening watches set up, and vital security outposts organized, all thought now reverts to the original mission of any infantry company—that of destroying the enemy.

Patrols must reconnoiter the enemy's main supply route for good ambush points and pinpoint his logistical and tactical units and installations. Particular attention must be given the enemy's sources of food and of ammunition and explosives; his communications facilities and equipment that can be easily sabotaged; highway features such as bridges, culverts and defiles, and any enemy security means on them; infantry and armor units that might be employed against Captain Bravo; artillery and missile positions, whether already occupied or being prepared; POL dumps; airstrips and airfields.

Since Class I resupply is of vital concern, Captain Bravo must thoroughly interrogate his patrols to determine which source of supply will be most remunerative while least compromising his position. In this connection, the possible resources in the positions formerly occupied by the parent battle group may have to be examined. If defense against CBR warfare has been adequate during training, there should be no particular danger from radiological contamination to men patrolling those positions.

While exploiting each source of food and ammunition, Captain Bravo and his entire unit will be constantly alert for ways and means of damaging the enemy. Some of these measures will be relatively passive, such as removing route indicators, minefield markers, and the like. At the same time, certain approaches into the company's present position would be booby-trapped and conceal AT devices seized from the enemy.

Unlike the conditions imposed by normal combat, each opportunity of destroying enemy soldiers and equipment must be most carefully weighed against the probability that such actions might compromise the company's entire area.

If each action—including careful selection of "killing areas" and routes of withdrawal—is rigidly controlled, weeks could elapse before a pattern of action would develop sufficiently to pinpoint the company.

Frustrate the enemy

Let's examine some actions we can use to frustrate the enemy.

Small bridges and culverts might be weakened so that they would collapse under vehicles, or mined to destroy them.

Isolated radio and radar installations should be destroyed, or at least harassed to the point where appreci-

able numbers of the enemy must be diverted to guard them.

Communications wire can be cut, with loose ends sometimes booby-trapped. Some loose ends could be left harmless, just to give enemy repairmen something to sweat about.

A remotely controlled fougasse in a cut or defile can be used to destroy men and matériel and weaken morale.

Special efforts should be made to clear the enemy's forward PW inclosure. This not only gains reinforcements for our side, but causes the enemy to worry about the strength of any forces we might have behind his lines.

If regular communications have been reestablished with the main body of our forces, we can hold up burning a POL dump until we need a good marker for guiding an air attack.

If the enemy uses installations similar to ours, his water points will include easily destroyed material. If we find his water discipline lax or non-existent, a carefully misplaced "honey cart" might spread disease through an entire enemy division.

While a tank park may be too well guarded for effective sabotage or assault, antitank mines (lifted from the enemy), judiciously placed, could generate some interesting fireworks.

If the enemy moves to a new area of operations, an extra effort to destroy or contaminate what Class I supplies of his we can "liberate" is worth considering.

Maximum effort must be used

While engaged in any of this guerrilla type devilry, Captain Bravo must never forget that he has at hand a well organized and properly trained fighting force. Objectives worthy of maximum effort must always be sought. An enemy field artillery battalion, if not too close to one of his infantry or armor units, might well become the object of attention. So might a division or corps CP. Of course the higher the headquarters damaged, the greater the ensuing confusion. For obvious reasons, Captain Bravo must refrain from contact with enemy infantry or armor unless directed to do so by higher headquarters.

On the other hand, Captain Bravo must be constantly alert to pick up stragglers from friendly forces, to aid downed airmen and, in some situations, assist friendly irregulars.

So far we have given Captain Bravo a rather free hand. However, this should be the exception and not the rule. He must constantly endeavor to establish contact with friendly forces. It is highly likely that shortly after his parent battle group was destroyed, Army aircraft would have been overhead to assess the damage. He must attempt to make contact with these aircraft by both visual and electronic means. Each division's electronic surveillance plan should provide for constant monitoring of the radio frequencies of any cut-off or missing unit.

Now, assuming that its units have had proper train-

ing and adequate practice in maintaining communication under very adverse conditions, division will know within 48 hours or less that Captain Bravo, with at least some effectiveness, still exists behind enemy lines. It must immediately formulate plans for preserving this contact and, through it, control.

So long as any lower unit retains tactical identity—regardless of its location—the next higher commander is responsible for assuring it maximum support. All support—including assignment of combat missions—is predicated on the ability to maintain communications.

Take positive action

When the commander has determined the strength and armament of a subordinate cut-off unit, and has reestablished communications with it, he must strain every effort to exploit what the tactical planners said can be accomplished if only our troops can get into the enemy's rear areas. The seeming fantasy of the planners has become reality. Their dream plans can now be dusted off and implemented—fast.

Assuming that some communications are reestablished, these data and instructions will flow through the communications channel: strength reports which, if courier-handled, would include names; equipment strength reports; identification, strength and location of enemy tactical and supporting units; requests for supplies and equipment which cannot be seized from the enemy; evacuation of casualties; requests for intelligence on specific units or localities; evacuation of escaped prisoners of war; warnings of impending enemy actions that appear particularly dangerous to Captain Bravo's unit; instructions for special sabotage or harassment missions; special signal operating instructions; assignments of combat missions in support of friendly tactical action; requests for artillery and air support to execute assigned missions; requests for artillery forward observers and Air Force flight-control personnel and their equipment for control of fire support; directions for safe return routes to friendly lines.

This list of traffic over communications facilities is meant to serve only as examples. Necessary additions or deletions can be made as the tactical situation and the condition of terrain require.

Now is the time for commanders of all units to include in their field training the conditions we have described. They must exert every effort to learn ways and means of maintaining contact with cut-off units and directing their potentials to where they will be most remunerative to the whole command. True, some cut-off units may not be able to get in contact with friendly forces. Unless they take some positive action they will be destroyed anyway, without having contributed anything worthwhile to the Army's mission.

Such training will teach junior leaders and noncommissioned officers that although being cut off from friendly forces will be a common occurrence on the battlefield, continued tactical existence can be preserved if properly prepared plans are vigorously executed.



Genial Israel ("Judge") Wice is the chief of those who pan for gold in the General Reference Office.

COLONEL WARREN H. HOOVER
The Acting Chief of Military History



It is a shocking fact that there were 91,000 cases of "cold injury, ground type" (trench foot and frostbite to the combat soldier) in the Army during World War II—crippling losses that might not have occurred had the lessons of the past been studied.

The Army Surgeon General's Office has published an entire volume on the subject [it was reviewed in the November 1958 issue of *ARMY*], but in addition, deep in the files of the General Reference Office of the Office of the Chief of Military History (OCMH) are unpublished studies by German and Japanese officers on Russian methods for counteracting cold, and about winter fighting in Manchuria. These are but a fraction of the many unique materials available at OCMH for the military scholar.

The Gold Mine at OCMH

Mary Tanham

Dr. Robert Ross Smith, historian; Dr. Kent Roberts Greenfield, former Chief Historian; Lt. Col. Ernest E. Steck, Chief, Editorial and Publication Division; Col. Septimus B. Sightler, former Chief, Lineage-Honors & Properties Division; Dr. Louis Morton, historian; and Dr. Stetson Conn, now Chief Historian.



"We have World War II data on everything from packaging containers to the Manhattan Project, from the history of the development of radar and the occupation of Europe to procurement of Army personnel," says Mr. Israel (Judge) Wice, who has headed the General Reference Office (GRO) since its establishment fifteen years ago.

GRO is a central clearing house for historical data and custodian of all historical studies undertaken by the Army. Its files are a mine of irreplaceable secondary source materials for the military student, writer and planner.

For the soldier, access to this wealth of fascinating history poses no problem. But each request from a civilian for its use is considered on its merit. For example, a student preparing a thesis on military balloons would find an unclassified work on observation balloons in the Civil War as well as a highly classified compilation of incidents relating to appearances on our West Coast during 1944 and 1945 of Japanese free balloons.

General Taylor, in his introduction to the new Contemporary Military Reading List, says: "For a military man, the process of education and intellectual growth must never end. . . . A significant part of his education must be acquired by personal study." For those serious scholars, interested in pursuing a systematic study of military history, "Judge" Wice and his staff will locate or provide valuable source materials, compile bibliographies, and verify, compare or authenticate historical data.

Perhaps the most important studies in GRO are those that have been and are still being prepared at overseas theater headquarters on the Army's major experiences in World War II and the postwar period. Still more *unusual* are the foreign studies, by Japanese and German officers, on the enemy side of the story.

Monographs by foreign officers

Many of these monographs have been incorporated into the Army's big green-covered history series, *U. S. Army in World War II*, and in the forthcoming series tentatively titled *U. S. Army in the Conflict with the Communist Powers*. The published volumes can be found on the shelves of all military and in practically all federal depository libraries. But the collection of unpublished historical studies comprises approximately 3,000 separately bound manuscripts—an additional 2,300 German and some 200 Japanese monographs. This is a lot of good ammunition for the military man who prefers to follow the example of Bismarck: "Fools learn by experience; I prefer to learn by other people's experiences."

GRO is sole custodian of the special studies, written by Japanese staff officers, based on official documents,

personal papers, and recollections. These were prepared under the guidance of the Historical Section, U. S. Army Forces in the Far East, and include detailed accounts of Japanese activities from the Manchurian Incident of 1931 through the postwar period.

Among these are reports on submarine activities before Pearl Harbor, and information on the two-man, piggy-back, midget submarines that were subsequently doomed to failure; the operations orders for patrolling



Dr. Louis Marton, author of *Fall of the Philippines*, examines diaries of American POWs who buried them to prevent their falling into Japanese hands during the course of the war.

the waters between San Francisco and Seattle, and plans for shelling the West Coast on Christmas Eve of 1941! There are descriptions of the enemy's plans for attacks from the Aleutians to Australia, and an intriguing group of studies on Japanese-Soviet relations in Manchuria. The last provide accounts of small wars and border incidents as well as information on military topography and geography. Here is an example of detail about this obscure region, from a chapter titled "Cliffs," by a Japanese officer:

"Reconnaissance units and patrols should possess ropes and rope launchers, while major combat units should include amphibious tanks. Each of the armored vehicles should be equipped with special extension ladders of the fire-engine type, to be used for scaling cliffs. Time and effort will also be saved if cable cars

Mary Tanham, a Washington writer and researcher, has delved into the rich lode of history at OCMH on many occasions and has written several articles about it.



Detmar Finke, OCMH's German Army expert, reading from the famous "Halder Diary" of General Halder.

are available to haul supplies to forces cut off by cliffs from their parent units."

Unofficial first-hand materials

In addition to these monographs of the Pacific Theater in the reference section, Army historians at OCMH possess unofficial, first-hand materials, including diaries and memorabilia from Corregidor and a comprehensive directory that could be called a "who's who in the Philippines," a card-index file listing persons of high and low levels who were active in guerrilla warfare.

From the China-Burma-India Theater, historians have collected the "Dixie Mission" papers—accounts by our U. S. observer group with the Chinese Communist forces during 1944 and 1945.

OCMH has complete historical diaries of the truce teams sent to China on the Marshall Mission in 1945 and 1946. There are notes here on all of Major General Patrick J. Hurley's papers when he was personal military representative of President Roosevelt to Chiang Kai-shek. The originals are still in Hurley's possession.

Many of the 2,300 German postwar narratives in the files of GRO have been incorporated into published pamphlets on the Axis side of the war. However, because of the limited size of these pamphlets, important historical material has been left untapped. In this category are carefully documented studies on German logistics in Russia and the over-all strategic operations of the Axis in the Mediterranean.

German officers have written extensively on their experiences in Russia. A few monograph titles of cur-

rent interest are *European Russia: A Natural Fortress*; *Soviet Counterintelligence*; *Russia: Peacetime Preparations for Partisan Warfare*; *Russian Regard for Propaganda*; and *Russian Talent for Camouflage and Concealment, Ruses and Tricks*.

The reference office has many studies on the German Army's General Staff (*Generalstab des Heeres*). Because that staff is generally confused with the German Armed Forces High Command (*Oberkommando der Wehrmacht*), a Special Studies Division of German experts at OCMH has written detailed manuscripts on its organization. These are unpublished, but available for those who have need of the information in them.

Additionally, the Special Studies Division possesses a copy of the valuable *Halder Diary*, the private war journal of Colonel General Franz Halder, Chief of the General Staff of the German Army. In its present state the book is incomprehensible to the average reader, but it is being annotated by the diarist in Karlsruhe. In this division's files are copies of the original diaries of the German military intelligence office concerned with Middle East affairs during World War II. The pieces of these diaries, scattered over Europe after the war, have been assembled here and are unclassified. More on the Middle East may be found in the unpublished histories of the U. S. Army command headquarters in this theater.

GRO has valuable studies on the military and non-military activities of the occupation of Germany and Japan. They go into matters such as fraternization, currency exchange, local government reform, and health, education and welfare.

The Korean Conflict

Special historical detachments assigned to Korea have compiled more than a hundred narrative manuscripts of that conflict, based on interviews, letters and personal accounts of participations in small actions as well as in the high command. These describe inter-Allied cooperation on the language barriers of United Nations troops, and explore the problems of logistics, personnel and morale.

Available to the student are the early histories of the military advisory groups to many countries, including Korea, Indochina, Thailand, and Greece. These missions were the forerunners of the present-day MAAGs.

Since the end of the war—anticipating the future needs of staff and service schools—OCMH has conscientiously attempted to collect and list official and unofficial historical data on special subjects such as airborne operations and psychological and guerrilla warfare. In addition, it inherited from its predecessor (the old historical staff of the Army War College) a unique collection of World War I studies. A few of these are *Absences and Desertions*, *The Colored Soldier in the U. S. Army* and *Methods of Protection of Government Supplies in Transit*.

Under the direction of the Office of the Chief of Military History, Army agencies now prepare annual

reports of major events and problems. The reference office maintains a complete set of these histories on a current basis. It has collected information on the Army's contribution to the welfare of the nation's civilians in peacetime, such as aid in disaster relief. In addition to a fairly complete set of Department organizational charts, the GRO also maintains copies of all Pentagon telephone directories issued during the past fifteen years!

Unit histories

To promote and improve esprit among military personnel, the Lineage and Honors section, a separate office of OCMH, prepares unit histories for the Regular Army, the Army National Guard, and the Army Reserve. Historical facts concerning units are verified for speech-writers and published histories of past and present units are located for the civilian and the military researcher. This branch has written a pamphlet to be used as a guide in the preparation of unit histories. It also has a definitive study of the Combat Arms Regimental System (CARS).

"Judge" Wice's staff of eight in the General Reference Office are specialists by avocation, special training, and interest. Among them are an expert on Korea and current problems, a specialist on past and present military installations, a military antiquarian, and an archivist who is responsible for maintaining the special historical manuscripts collection.

Each month OCMH receives hundreds of queries. The resulting answers or special studies are catalogued for future reference. Service to the general public rarely includes extensive research, although information is given on sources and bibliographies. Letters pour in from amateur historians, from writers, from servicemen, and even from school children. Often amusing, they are more often demanding. One might ask: "Will you please send me as much information as possible regarding the financing of the Civil War, the financing of World War I, economic mobilization in wartime (1917-1918) and the economic demobilization after World War II?"

Another entreats: "Please send me information about what happened after the Crusades up until the discovery of America."

One of the most frequent criticisms of current military writings is that they are poorly researched and not well grounded in history. The lode of historical information at OCMH is available to the serious student for staff duties, speeches and public statements, for the faculties and students of staff and service schools, and for members of units in the field. Particularly, this information is available to those writers, historians and researchers who believe in the importance of the concluding remark of the Rockefeller report: "What is required throughout the country is an attitude of sustained and informed determination."

OCMH's highly competent chief cartographer, Wsevolod Aglaimoff, looks over the work of one of his draftswomen.



NUGGETS FROM THE

It has been some time since ARMY published the full list in OCMH's program of titles dealing with the history of the U. S. Army in World War II. These are the "big green-covered" history series to which Mrs. Tanham refers in her article. Any title can be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Send a postal money order, because he can't accept personal checks. Where prices are given it means the volume has been published and is available; the rest are in process. Those marked * have been published but are out of print.

European Theater of Operations

Cross-Channel Attack	\$ 6.75
The Lorraine Campaign	11.00
The Supreme Command	6.50
Logistical Support of the Armies, Vol. I	4.50
Logistical Support of the Armies, Vol. II	
The Siegfried Line Campaign	
The Ardennes Campaign	
Breakout and Pursuit	
Southern France and Alsace	
The Last Offensive	

The War in the Pacific

The Fall of the Philippines	5.25
*Guadalcanal: The First Offensive	4.00
*Okinawa: The Last Battle	8.50
The Approach to the Philippines	6.25
Leyte: Return to the Philippines	6.75
Gilberts and Marshalls	5.75
Cartwheel: Reduction of Rabaul	
Victory in Papua	6.00
Triumph in the Philippines	
Campaign in the Marianas	
Strategy and Command, Vols. I and II	

China-Burma-India Theater

Stilwell's Mission to China	5.50
Stilwell's Command Problems	6.25
Time Runs Out in CBI	

The Middle East Theater

*The Persian Corridor and Aid to Russia	4.00
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Mediterranean Theater of Operations

Northwest Africa: Seizing the Initiative in the West	7.75
Sicily: Surrender of Italy	
Salerno to Cassino	
The Drive on Rome	
Advance to the Alps	
Strategic and Logistical History: MTO	

Western Hemisphere

The Framework of Hemisphere Defense	
Guarding the United States and its Outposts ..	

The War Department

Chief of Staff: Prewar Plans and Preparations ..	4.25
Washington Command Post: The Operations Division	3.75
Strategic Planning for Coalition Warfare, 1941-42	3.75
Strategic Planning for Coalition Warfare, 1943-45	
Global Logistics and Strategy, 1940-43	6.25
Global Logistics and Strategy, 1943-45	
The Army and Economic Mobilization	
The Army and Industrial Manpower	
The Procurement of Air Matériel	

Army Ground Forces

*The Organization of Ground Combat Troops ...	3.25
The Procurement and Training of Ground Combat Troops	5.25
Air-Ground Studies	

Army Service Forces

The Organization and Role of the ASF	4.25
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The Technical Services

Transportation Corps

Responsibilities, Organization, and Operations ..	3.75
Movements, Training, and Supply	4.25
Operations Overseas	6.50

Quartermaster Corps

Organization, Supply and Services, Vol. I	3.75
Vol. II	4.00
Operations in the War Against Japan	4.00
Operations in the War Against Germany	

Signal Corps

The Emergency: Through 1941	3.50
The Test: To Mid-1943	4.50
The Outcome: Through 1945	

Ordnance Department

Planning Munitions for War	4.25
From Factory to Fighting Front	
Ordnance Overseas	

Corps of Engineers

Troops and Equipment	
Construction in the United States	
Operations Against Germany	
Operations Against Japan	

Medical Department

Hospitalization and Evacuation: ZI	4.00
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RICH OCMH LODE

Chemical Warfare Service

Organizing for War	
From Laboratory to Field	
Chemicals in Combat	

Finance Corps

Finance Corps in WWII	
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Civil Affairs

Soldiers Become Governors	
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Special Projects

Master Index: Reader's Guide50
Military Relations Between the U. S. and Canada, 1939-45	
History of the Women's Army Corps	6.25
*Three Battles: Arncliffe, Altuzzo, and Schmidt	4.50
The War Against Germany and Italy: Mediterranean and Adjacent Areas (Pictorial Record)	4.00
The War Against Germany: Europe and Adjacent Areas (Pictorial Record)	3.75
The War Against Japan (Pictorial Record)	4.00
The Employment of Negro Troops	
Statistics	
Chronology	
Rearming the French	4.25

The American Forces in Action, like its more comprehensive counterpart, was prepared from the observations and researches of combat historians. This series is paper-bound.

*Papuan Campaign	
*To Bizerte with the II Corps	
*Salerno	
*The Winter Line	
*Merrill's Marauders	
*Omaha Beachhead	
*The Admiralties	
*Makin	
*Guam	
*Small Unit Actions	
Volturmo40
St. Lô	1.25
Anzio Beachhead	1.50
Utah Beach to Cherbourg	2.00

World War I Titles

The United States Army in the World War, 1917-19 was completed in 1951. These consist of reprints, in whole or in part, of significant official documents which describe the organization of the AEF, its policies, training, combat operations, and the postwar period, including the final reports of the AEF staff.

Organization of the AEF	3.00
Policy-Forming Documents of the AEF	4.00

Training and Use of American Units with British and French	3.75
Cambrai, Somme Defensive, Lys, Aisne Defensive, Cantigny, Château-Thierry, Montdidier-Noyon	3.75
Champagne-Marne	3.50
Oise-Aisne, Ypres-Lys, Vittorio-Veneto	3.00
Somme	4.75
St. Mihiel	2.75
Meuse-Argonne	3.50
The Armistice	6.00
American Occupation of Germany	3.00
Reports of G1, AEF	2.50
Reports of G2, AEF	2.50
Reports of G3, G4, and G5 and Schools	2.75
Reports of Staff Sections and Services	3.00
General Orders, GHQ, AEF	4.00
Bulletins, GHQ, AEF	2.00

Order of Battle of the U. S. Land Forces in the World War, 1917-19. The first volume, covering divisions, was published in 1931, and is out of print. The second, dealing with corps, armies and theaters, published in 1937, also is out of print. The third (in two parts), was published in 1950 and deals with the Zone of Interior (\$6.00).

The Korean War

The history of United States Army operations in Korea, like the other series, endeavors to give to the Army, to scholars, and to the interested public a detailed and trustworthy record of all important phases of the conflict. (The last two were published by Combat Forces Press, 1529 18th Street NW, Washington 6, D. C., and are not available from the Government Printing Office.)

*Korea, 1950 (Narrative-Pictorial Record)	1.25
Korea, 1951-53 (Narrative-Pictorial Record) ..	2.00
Combat Operations, Vols. I, II and III.	
*Combat Actions in Korea: Infantry, Armor, Artillery	5.00
Combat Support in Korea	5.00

Special Studies

Here is a list of remaining titles published under the Special Studies program:

The Writing of American Military History: A Guide	1.50
History of Military Mobilization in the United States Army, 1775-1945	3.75
History of Prisoner of War Utilization in the United States Army, 1776-1945	2.00
The Soviet Partisan Movement, 1941-44	2.25
The German Campaign in Poland, 1939	2.00
The German Campaign in Russia: Planning and Operations, 1940-42	1.25

MAJOR GENERAL H. P. STORKE



The creation of a strong, clear and positive image of the Army is the job of all of us

IMAGE

OF THE ARMY

WHEN the President of the United States was a general in the best army in the world, he made a pointed statement that we should never forget:

"A well-qualified public relations officer can do much to lessen and counteract adverse criticism. However, it should be borne in mind that the impression gained by the public of the Army is largely formed as the result of daily contacts of civilians with officers and enlisted men."

How true!

We're a good Army, and we know it. But if we rest on our oars we'll drift. To be good is not enough. We must *show* "good." We must let the public know how good we are. To be ready for action—any kind, any place, any time—we must be continually taking stock of what we have, and ask ourselves: "Where do we go from here?"

What made the reputation of our Army so good? What will make it better? The answers to both questions are the same: Producing results and at the same time establishing good public relations for the Army. By that I mean establishing good relations through our friendly contacts, as individuals, with people in and outside the Army. Whether these contacts leave a good or bad impression of the Army depends largely on you and me. Good public relations will make our Army team stronger for national defense.

One bad actor in our midst can do untold damage

to our progress in establishing good public relations. The bad apples must be removed from the barrel before others become contaminated. We are accomplishing this by setting higher standards for newcomers and by screening out deadwood.

We who know the Army, and proudly respect it in our knowledge, can create in the public mind the true image of the Army: a progressive Army, a dynamic Army, an Army of such positive accomplishment and vital significance in the national defense structure that occasional missteps and isolated personal boners cannot distort that *Image*. Sticks and stones may hurt our bones, but half-truths and false boasts by others will not harm us when our Image stands true and clear.

Keep the record straight

How can we set and keep the record straight? That's a good question, to which there's a good answer. We must realize that every one of us is a "public relations man" and that each of us must go about our daily tasks living and preaching the true Army gospel, like military missionaries. We know we have a good product, and that a good Army should be easy to sell. But it won't be easy to sell—unless we all get out and work.

No matter how good you are, there comes a time when a little ballyhoo makes sense. Even the best soapmaker or cigarette manufacturer finds it necessary to campaign continually for his product, especially when a competitor comes out with a new additive. We could take a lesson from the manufacturer of a well-known soft drink right here. The theory behind the tremendous popularity of his amber liquid is that he

Major General Harry P. Storke, USA, is the Army's Chief of Information.

keeps it *favorably* in the public eye at all times. Are we doing this for the Army?

Sure, we have the best Army ever, but you and I can do a great deal toward improving its reputation. What are we going to do about it? Let's start at the grass roots. What we most urgently need is a broad base of Army public relations—a genuine grass-roots foundation of Army boosters embracing those who now wear the Army Green, those who once wore the Olive Drab, those whose sons or daughters once wore these uniforms, and the relatives and friends of all of these.

We have a good start on our broad base already. What we need to do now is expand and exploit our beachhead. Important in our broad public relations structure are the Civilian Aides to the Secretary of the Army; members of AUSA, the Retired Officers Association and the veterans' organizations; Reserve Officer Mobilization designees, National Guardsmen, Reserve officers, military writers and broadcasters, the Active Army, dependents of servicemen, recruits, civilian employees, recruiters, our Joint Civilian Orientation Conferences, leaders in industry, business, and various other patriotic groups. The list is endless.

Tell it straight

Every one of us—from private to general—has a job to do. That job is to tell the Army's story and to tell it straight. Those of us who are in service can promote the Army by wearing its uniform proudly. The public judges the Army in terms of the soldier's appearance and actions; the lowest-ranking private is one of the Army's most forceful spokesmen.

Most readers of this magazine have strong ties with the civilian populace. You are either in the Active Army or retired, in the National Guard or Reserve, or are affiliated indirectly with the Army. Or perhaps you just have the Army's interests at heart. The category you are in does not matter. You are in a position to do your Army some good.

Here are some good ways to keep up to date and to bring others up to date on your Army. Get on the mailing list for *Army Information Digest* and the *Liaison Bulletin*, both published by the Office of the Chief of Information (OCINFO). Write for our speaker's guide, *Know Your Army*. Be on the lookout for the new speechmaker series—a set of seven talks each of which is designed to support those subjects the Army is stressing during Fiscal Year 1959. There will be nine slides, in color, for each speech, along with an attractive folder containing a copy of the talk, slides, instructions, and other details. Also, letters will precede the speeches. These will encourage grass-roots Army supporters to get into the speaking business more often. The first speech of the series should be ready during January 1959. [If you can't get any of the materials mentioned in this article from local sources, simply write to OCINFO, Department of the Army, Washington 25, D. C.—ED.]

Ask your nearest military-film librarian to obtain 16mm movies of such important shows as the Army's new film on modernization, "A Sharper Sword and Stronger Shield," and extra reels of the TV series, "The Big Picture." These and similar films are excellent for showing to luncheon clubs, patriotic groups, and various other civic organizations. The people at your nearest Army post, agency, or recruiting station will help you locate a projector and operator. Read, study, and be able to quote facts about the Army from *U. S. Army Reports—Progress '58*, available early in 1959.

Join your community

Too many of us in the Active Army are inclined to steer clear of civilian community affairs. We can't be bothered because we think we have nothing in common with civilians. That is a wrong attitude—one that should be corrected *now*! One of the best ways of keeping the Army's story before the public is to take advantage of and support community projects. Get to know your neighbors. After all, the main difference between civilians and soldiers is the uniform. We are citizens first—and always. When we don the Army Green we become citizen-soldiers, don't we?

Ask yourself: Am I a member of the church of my choice in this community? Do I belong to the neighborhood Parents-Teachers Association? Did I say "Certainly!" when the local civic club asked me to join? Do I contribute to local charity drives? Am I doing my part in the community? Do I speak before civic organizations when asked? If you can answer Yes to most of these questions, that's great! We need thousands more like you.

Grass-roots rooters for the Army don't necessarily have to be in the Active Army. Some of our best boosters are Reserve Officers and National Guardsmen who served during World War II and Korea. These people are an essential link between the Army and the grass-roots public, and they can exercise tremendous influence on other civilians. If they don't get the Army word and pass it along, our grass-roots public will never become properly informed about the Army and our objectives. Whether you are at a one-man recruiting station in Caribou, Maine, or on ROTC duty in Kalamazoo, Michigan, you've got a job to do. That job is to tell the Army's story, and to tell it straight.

What story is there to tell? A rhetorical question, we'll admit, but it deserves an answer here. You can tell about things like these:

The Army's story

¶ **THE THREAT**—so vividly stated and restated by Marx, Lenin and Stalin, and their successors. So vividly portrayed today by 175 Soviet ground divisions (not including those of satellite forces), a modern, effective war machine the danger of which the world has never before faced during peacetime. Its eventual purpose—?

¶ **MAN, THE ULTIMATE WEAPON.** His mind remains transcendent in this world. He will never be replaced

The Product Must Be Good

The symbols, slogans, and clichés employed in propaganda other than advertising can also function more easily as a stimulus than they can as a response. In either role, however, they are effective because they can be perceived, remembered, and constantly reinforced. As the Allies moved into Germany in the last war, they removed all the swastikas in their path. For they knew how strongly identified these signs, both as stimulus and responses, had become with the Nazi way of life. Removing the swastikas, however, proved to be simpler than eradicating the responses which their promulgation had established in most Germans.

Many propagandists are faced with a difficult assignment when their clients tell them, in effect, "Here is the product I want to sell; now go design some propaganda which will increase sales." It may be true, as has been suggested above, that part of the reward from action depends on the propaganda which has brought about that action, but more important may be the satisfactions resulting directly from the action itself. No matter how alluring and extensive the advertising copy, it is difficult to imagine how a brand of coffee which tastes like disagreeable cough medicine could ever be successful. No matter how many surrender leaflets in time of war are sprinkled from the sky and no matter how the facts and pseudo-facts therein are limited, it is unlikely that many soldiers will surrender to an enemy whose actual maltreatment of prisoners has been substantiated and publicized by the International Red Cross. And no matter how much cake and propaganda and no matter how many circuses a dictator provides, undoubtedly his popularity will not increase appreciably when his people need bread and are otherwise suffering. Propaganda, in a word, cannot accomplish miracles in the face of competing responses . . .

LEONARD W. DOOB in *Public Opinion and Propaganda* (Henry Holt© 1948)

by automation—the pushbuttons—which he has invented himself.

¶ **LIMITED WAR.** Remember, 18 limited wars have been fought since 1945. There are no present indications of a halt in the piecemeal nibbling for which the Kremlin continues to pull the strings. We must be fully prepared to meet any and all threats of limited war in the future.

¶ **GENERAL WAR.** We must avoid general war at all costs commensurate with our national dignity and the ethics of mankind. But we must be ever ready to fight a successful general war if it comes.

¶ **NEEDS OF THE ARMY**—and that includes the Active

Army, the National Guard, and the Army Reserve—all together. For all components an adequate budget, manpower of the highest quality and in adequate numbers, the most modern arms and equipment, and sufficient airlift.

¶ **BENEFITS OF AN ARMY CAREER.** Being trained to be ready instantly to defend our freedom. The Army offers retirement benefits, increased pay, education opportunities, travel, broadening of general viewpoint, learning good citizenship and principles of leadership, and the benefits of character guidance.

¶ **POINTS OF ESPECIAL ARMY PRIDE.** The Army's splendid leadership, its farsightedness; the Pentomic reorganization; Army missiles, the Jupiter and Nike families, the Explorer earth satellites, electronic developments, the Jupiter nose cone; STRAC, the solar furnace, advances in communications, the flying jeep. There are many other triumphs by all our technical services in research and development.

Yes, we have much to talk about. We can tell the grass-roots public about the Army's many accomplishments.

General J. Lawton (Lightning Joe) Collins had this to say about keeping the public informed (and he was so right!):

"We are not going to let the public know what we are doing if we simply stay at our stations, if we do not mix with them, if we do not let them understand what we are like, what we are thinking about, that we are human beings just as they are, and that we are only citizens wearing uniforms. Therefore, I feel strongly that at all of our posts our officers and men must join the community life of the town and cities nearby. They must get out and mix and talk and associate with the leaders of the communities, and make clear to them that they are responsible as well as we are for our national security."

For the national defense

Now, more than ever before, is the time for all of us, in uniform and out, to tell the Army's story and to tell it accurately. Public opinion will do the rest for National Defense. If, in the best interests of National Defense, there should be newer RIFs and newer Army budget cuts, then we must tell the taxpayers about their Army.

Put those thoughts in your mind and mull them over again and again. Then get into the act with all you've got. Good Army relations can't be created by the public information officer alone, nor by a few Army rooters on the sidelines. Every one of us must get into the act. The actions of every person affiliated with the Army, whether he knows it or not, help form the Army's relations.

Good Army relations is an individual responsibility—it's your job and mine! Our Army is good, and is devoted to an adequate National Defense. Let's make sure the public understands these facts.

Get into the act!

YES OR NO ANSWERS ONLY

Lieutenant James F. Coogan

An automatic digital computer cannot reason, although it tends to make you think it can. Nevertheless, it is truly an amazing machine with great usefulness in war and peace.

THE automatic digital computer is the first machine that man has attempted to endow with thinking powers. Of course, a machine can be no more intelligent than its creator. It answers simple yes-or-no questions, but it cannot reason; it can only analyze or carry out with detailed precision the instructions given it by its operator.

These mechanical brains, however, are endowed with one attribute that man does not possess: they are not influenced by emotion. Yet even the simplest problem must be explained to a computer in extreme detail before it can act. Let's examine some problems and see how a mechanical brain handles them.

Lieutenant James F. Coogan, Signal Corps, is an instructor in the Officers Department of the Army's Signal School and has specialized in automatic data processing systems, including the basic principles of programming and machine operation.

A computer can perform only the most basic operations. It can *add* and *compare*; all its other actions are based on a combination of these basic operations. It can understand only two states: the presence of conditions, or their absence. This can be *change* or *no-change*, *on* or *off*, or any state that can be easily represented electrically, thus enabling the system to receive and manipulate data. Letters and other symbols may also be represented by combining these two states. A computer is indeed an amazing achievement, but we must try to understand the machine.

An electronic brain can push its own buttons at the proper time. Thus, all the operations required for a given calculation are carried out in the proper *sequence*. The computer gets its button-pushing ability through a complex maze of electronic circuits built within the device. These circuits act much like a high-speed telephone exchange, but instead of electro-mechanical relays it uses fully electronic

switches. At any one time there can be an output from one—and only one—of these switches, depending upon what part of the calculation is being performed. To understand when these instances are to occur or when and where to start, the machine depends upon information supplied by its operator through the *control unit*, composed of these high-speed switches. This unit controls the operations of the other two in the *central processing unit*: the *arithmetic unit* and the *memory unit*.

The memory is some highly electro-sensitive material that can retain information for long periods. The computer uses it much as one uses a scratch pad to note a problem and any usable intermediate results.

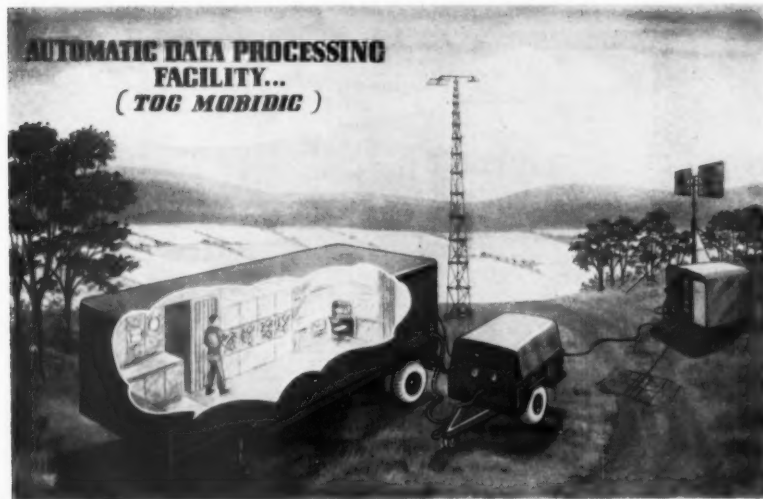
The arithmetic unit performs all the mathematical operations, all others becoming subservient. The machine can only add. (Subtraction is by complementary addition, multiplication by shifting and adding, division by repeated subtractions.)

However, one problem remains: how to feed information and receive it. For these we need an input-output unit that can perform several functions and is so designed as to allow us to spell out coded input information that can be easily and quickly converted for use by the machine. This could well be an electronic box that would perform the conversion so as not to occupy the more valuable time of the central processing unit. The input-output devices would be more useful if they were readily compatible with the present punched cards or punched-paper tape or if the read-write rate were extremely high, such as is provided by magnetic tape.

We have mentioned five of the basic components of an automatic data processing system: (1) the input equipment, (2) the output equipment, the central processing unit which is in turn divided into (3) the memory, (4) the control unit and (5) the arithmetic unit. The sixth is the communication devices which can be used to link the different automatic data processing systems. With the use of higher-speed communications devices, it might be conceivable to have computers convey the direct transfer of information.

We have noted that in order to obtain a solution the problem must be stated as a detailed list of instructions (or program). These directions are fed into the machine by the input

The MOBIDIC automatic data processing facility is a typical interim model of mobile digital computer under development for the Army Signal Corps. The air-transportable model shown here will be used at army and higher headquarters. Smaller ones will be used at lower echelons of the field army.



device and stored in its memory system. The program is divided into the instructions section and the data section. Both instructions and data are represented by combinations of numbers in the computer.

After a program has been developed, execution begins by manually entering into the control unit a number representing an address, the location of the first step in our program. For a computer, addresses are read like map coordinates: right and up. Information may be entered or read from any position (or memory location) by indicating the address or the coordinate of that location. In each location is a computer word, which may be an instruction to the machine (a command, such as add, subtract, or multiply, and an address) or data. Instructions and manipulation of data are executed with precision and at very high speeds. This is what gives an observer the romantic impression that the computer can think.

To show how detailed these instructions must be, let's direct a computer to solve a simple payroll computation. The program or set of instructions has been read into the machine's memory, and we are ready to begin. First we need a punched card showing total number of hours worked during one week by an employee, and his identification number which the computer uses to connect him with his record. When a number, indicating the location of the first instruction, is entered manually into the control unit, the machine is then placed in normal operation. This might be an instruction which will activate the proper circuits that enable the computer to read a punched card recording the data to be processed.

Our electronic brain then checks to determine if the total hours for the week were more than 40. If they are, it proceeds to calculate total overtime. Although this checking is a relatively simple task, it illustrates the computer's only decision-making capability. It can decide by automatic inspection whether the result of an operation is a positive, a negative, or a zero figure. It cannot check for all three at one time, but in effect it does answer simple yes-or-no questions. For example, in our payroll problem, when it is asked, "More than 40 hours?" the computer subtracts a constant 40 from the total hours worked (information that had been transferred from the card to memory). If the result of the subtraction

is a positive figure, overtime must be computed; so for its next instruction the machine transfers to the overtime calculation routine. If the result is negative, the computer will not transfer but will proceed to the next location to read the instruction it is to execute next.

Machines will always try to maintain sequence through the steps of an operation (1, 2, 3, 4, and so on) unless the sequence process is interrupted by a transfer command (as in our overtime example).

At this point we might compare the operations of our electronic brain to the solution of the same problem by the familiar adding machine. First we enter the total hours worked into the accumulator of the adding machine. This action is governed by the human operator (the control unit), who reads the total hours worked, mentally inspects the figure to determine if it is more than 40, and then chooses the proper method of calculation. If the total hours worked are not more than 40, the hourly wage is entered on the keyboard and the adding machine is commanded to multiply. Since it will be needed for future use, the operator notes on a scratch pad the result (gross pay) appearing in the accumulator.

The computer performs a similar type of operation, but instead of writing on a scratch pad, through the use of an instruction it stores the information in its memory.

The computer continues to try to execute instructions until it reaches a stop notice, which automatically arrests the operation of the central processing unit until the operator resumes the program by pushing the start button.

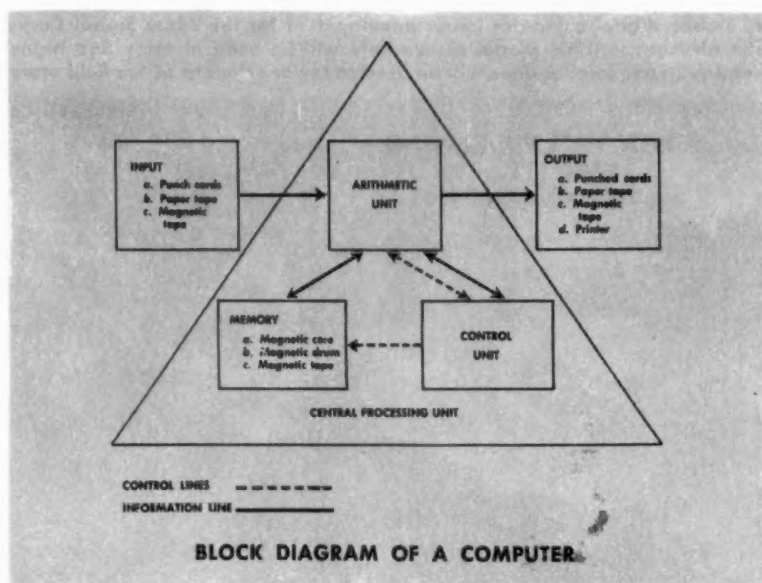
What are some possible uses the Army might make of the speed and flexibility of digital computers? Can they ever be used under combat conditions. Will a unit ever be built that will not be too complex to move?

The Signal Supply Agency in Philadelphia now uses a large-scale computer for logistical operations. The Army's present plan will join all Signal Corps depots in order to achieve centralized accountability. Each depot will utilize a medium-scale computer to perform needed calculations.

Wargaming is another interesting application, where a digital computer simulates the probable outcome of a given battle. The action may be fought over and over in order to give an insight into the effect any particular decision might have upon outcome.

Other fields of military interest are scientific or mathematical problems that might utilize a computer, combat surveillance, military intelligence, fire control, or any problem that lends itself to the vast complexity of these high-speed computing systems.

A transistorized mobile digital computer called MOBIDIC (Moby Dick) is being developed for use at command posts of higher headquarters in the field.



Into a lashing Montana blizzard with temperatures of minus 35 degrees, Lieutenant Frank Baldwin led a battalion of the 5th Infantry into Sitting Bull's lair



Sitting Bull, Medicine Man of the Dakota Sioux, photographed in 1882. The flag in his hat was an Indian campaign ribbon showing that the wearer had fought against the U. S.



Frank D. Baldwin wearing both issues of the Medal of Honor (Oak-Leaf clusters came into use much later). At the time this photograph was made Baldwin was a lieutenant colonel.

The Avenger of Custer

Colonel Jack W. Rudolph

THE conquest of America west of the Appalachians and the pacification of its Indians is a long record of death and fire swirling across the nineteenth century. For nearly a hundred years the struggle raged between red man and white, rising to a bloody climax in the three decades after the Civil War. It is a thrilling,

brutal and not always glorious chapter in our history. A handful of hard-bitten, hard-fighting and—when they could get it—hard-drinking men of the United States Army not only won a vast domain but, like Tommy Atkins, “salted it down with their bones.”

From Appomattox to the eve of Manila Bay the small Regular Army was constantly in the field against hostile Indians. During thirty years it fought more than 1,400 battles, some of them humiliating defeats. It was bitter, ruthless warfare, quarter being neither asked nor given, and men were made or broken in the brief seconds that stood between life and death.

Colonel Jack W. Rudolph, USA, retired, is a staff writer for the Green Bay (Wisconsin) *Press-Gazette*, where he started as a cub reporter before entering West Point in 1929. Colonel Rudolph's entire service was in the Infantry.

The frontier shattered the careers of scores of youngsters coming out of West Point with the gleam of glory in their eyes, but for every man the West broke it also established a reputation. George A. Custer, Nelson A. Miles, Oliver O. Howard, George Crook, John Gibbon and Alfred Terry are only a few of the captains whose names stand bright in American military history for their contribution to the taming of the Plains Indians.

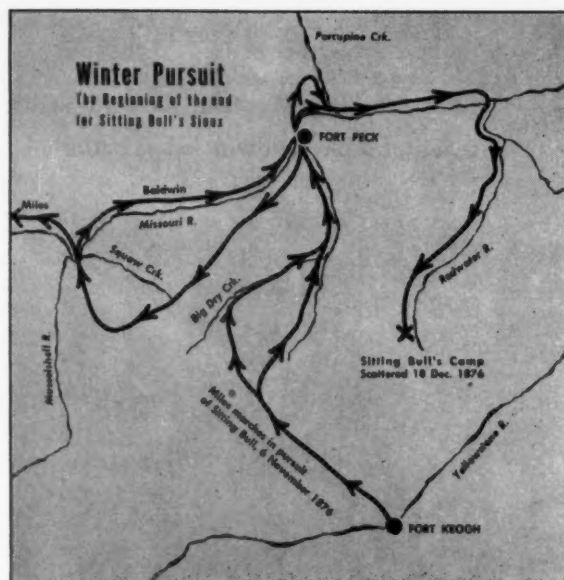
Not all the reputations earned on the western frontier have remained lustrous down the years; some of the brightest names of seventy-five years ago have been obscured by contemporary mediocrities. Why some should be remembered while better men are forgotten is an inexplicable caprice of history. Everyone knows the story of the Custer Massacre; few have heard of its avenger, the soldier who harried Sitting Bull through a raging Montana winter, caught him, beat him and drove him, a half-frozen refugee, across the Canadian line.

LIEUTENANT Frank Dwight Baldwin, 5th Infantry, was the forgotten man of the Sioux War of 1876, the man who smashed irreparably the power of one of the greatest leaders our Indians ever knew. Eighty years ago the name of Frank Baldwin was a household word along the frontier. His victory over Sitting Bull was only one episode in a remarkable career that carried him from the battlefields of the Civil War, through three decades of war on the Plains to the jungles of the Philippines. Although he retired as a major general after more than forty years of fighting service in the uniform of his country, today Frank Baldwin is unknown.

Born in Washtenaw County, Michigan, 26 June 1842, Baldwin first donned uniform as second lieutenant of the Michigan Horse Guards in September 1861. He became a first lieutenant of the 19th Michigan Infantry in 1862. He fought as a company officer throughout the great sectional conflict and saw action in every major battle in the West. As a company commander he won his first Medal of Honor for distinguished gallantry at the battle of Peach Tree Creek, Georgia, on 20 July 1864.

Soldiering came so naturally to young Baldwin that after being mustered out in June 1865, he merely exchanged his Volunteer trappings for those of a Regular, doffing his captain's shoulder straps for those of a second lieutenant in the process. He was assigned to the 19th Infantry in February 1866 and later in that year to the 5th Infantry and remained with his regiment until the eve of the Spanish-American War. He became an outstanding combat officer in an outfit whose rolls were studded with first-class fighting men.

He quickly established himself as a courageous and resourceful Indian fighter. The 1874 campaign against the Kiowas and Comanches was filled with his individual exploits, for one of which he was later awarded



a second Medal of Honor. Of all his adventures, however, the outstanding example of courage, resource and leadership was his pursuit and rout of Sitting Bull in the last days of 1876.

In the summer of that year, having defied orders to come into reservations, the Cheyennes, Arapahoes and Sioux united under the leadership of Sitting Bull and Crazy Horse to inflict upon the expedition of General Custer the most disastrous defeat suffered by American troops at the hands of the Indians in all the days of the Republic. Military reaction was prompt. Western posts were stripped as most of the Regular Army converged on the Montana badlands, where nearly three thousand exultant warriors screamed defiance.

Among the units sent from Fort Leavenworth was the 5th Infantry, commanded by Colonel Nelson A. Miles, already well on the way to fame. Although winter in Montana can be a nightmare of cold and howling northerners that strike without warning and which have been known to send temperatures down to 60 degrees below zero, Miles pushed boldly into the wilderness. Only when bitter cold had chained the Plains Indians to the warmth of their teepees did the "walk soldiers" stand an even chance of catching their mounted adversaries, who were not without reason numbered among "the finest light horsemen in military history."

While Miles was equipping his regiment as if to embark on an Arctic expedition, the difficulties of feeding a concentration of nearly twelve thousand persons forced the Indian allies to split for the winter. Crazy Horse moved to the head of the Tongue River and the Rosebud, while Sitting Bull camped north of the Yellowstone in the valley of the Big Dry Creek.

Establishing his base between them, at the junction of the Tongue and Yellowstone Rivers in Montana, where he built a cantonment that later became the permanent military post of Fort Keogh, Miles decided to

move first against Sitting Bull. Early in October the 5th Infantry crossed the Yellowstone in search of the Sioux.

The confident old medicine man made slight effort to flee. After a fortnight's advance, during which the soldiers' bivouacs were repeatedly raided by Indian outposts, the regiment encountered the main body of the Sioux near Clear Creek, Montana, on 19 October. A stormy two-day parley broke up in a general battle in which the Indians were defeated, their village burned and the warriors driven into the hills with little besides weapons and ponies. For three days the troops pursued the disintegrating band until most of the Sioux had surrendered.

Sitting Bull escaped, however, drawing off about five hundred of his best fighting men. Short of rations and hampered by a crowd of destitute prisoners, the troops were forced to break off the chase and return to their cantonment.

DURING this and subsequent operations Lieutenant Baldwin served as chief of scouts on the regimental staff. Although holding only subaltern rank, Baldwin had been breveted major for gallantry in the Civil War and in the 1872-74 campaigns. Brevet rank was honorary but could, upon Presidential authority, become actual rank. It was such blanket authorization that enabled Miles, who had implicit confidence in his chief scout, to place Baldwin in command of expeditions that included officers senior to him on the Regular

rolls. Once in charge, Baldwin was not the type to let the possibility of future repercussions bother him.

On 6 November the regiment resumed the pursuit. The 5th Infantry had its ten companies—480 rifles and seven scouts—all afoot except for about twenty mounted officers, orderlies and scouts. Thirty-six heavily laden wagons carrying food and forage for thirty days were in the column that crossed the Yellowstone at 0430 on a cold, blustery morning. A large herd of cattle, representing ten thousand fresh-beef rations on the hoof, went along to supplement whatever game could be provided by organized hunting parties en route.

According to Baldwin's diary several days of blustery weather had blanketed the country under about three inches of snow. As the day advanced the sun came out and converted this snow into heavy slush. For three days unseasonably pleasant weather made the going, especially for the wagon train, very slow and arduous.

By the third day most of the snow had disappeared, and the wind, turning cold, dried up the slush. The column made better time in spite of the rough and rolling nature of the country, much cut up by ravines and swept almost bare of grass by the buffalo herds constantly in sight.

Snow was falling again when the regiment reached the Big Dry Creek after a march of sixty-three miles. The night of 10 November was spent on the site of a large Indian encampment not more than five days old, and the march was resumed eagerly next morning across what Baldwin described as some of the roughest and most desolate country he had ever seen.

It was minus 20 degrees when the officers of the Tongue River cantonment were photographed in January 1877. Lieutenant Baldwin is the third figure from the right end of the line. In center is General Miles.



Pushing rapidly down the bed of the Big Dry under the lash of stinging cold, the column reached the Missouri River on the 15th. Baldwin left the command there and rode ahead to the Fort Peck Indian Agency, where he found a detachment of the 6th Infantry guarding an assembly of nearly three thousand Indians, many of whom had been out with Sitting Bull.

THE regiment spent several days at Fort Peck where Miles interviewed numerous Indians in an effort to get a line on Sitting Bull's movements and whereabouts. Among his visitors was a half-breed frontiersman, John (Frenchy) Brughiere, who had left the chief's village only a short time before. A dark handsome man, Brughiere was a colorful character along the frontier. He had been well educated, but had fled to the Indian country to escape an indictment for murder following a barroom brawl. (Frenchy's family lived in Yankton, South Dakota. He too would come to an untimely end, being murdered on the Upper Missouri. He was buried in the cemetery at the Fort Peck Indian Agency.) He enjoyed Sitting Bull's confidence, having acted as an interpreter for him, and he agreed to go back to the Sioux camp and try to persuade the chief to surrender.

It was a touchy business. If Sitting Bull wanted to be unpleasant, Brughiere's hair was likely to wind up on a Sioux lodgepole. In return for his risk, Miles promised to help him beat the murder rap.

Shortly after Brughiere's departure Miles learned that Sitting Bull was camped in the Black Buttes district, near the valley of the Musselshell. Without waiting for his emissary's return, Miles crossed the Missouri with six companies and took after his elusive quarry. Six days later, after a wide sweep of about 120 miles to the south and west, the column again reached the Missouri opposite the mouth of Squaw Creek. The march had been exceedingly tough, over country so broken that Baldwin called it the most worthless he had ever crossed.

The Missouri was open, running swift and deep, but so full of ice blocks that crossing was extremely hazardous. Baldwin built a raft but found the current too dangerous for ferrying. On one occasion Baldwin, Miles, a lieutenant and twelve men were marooned for hours in midstream when the raft fouled on a snag, in imminent danger of being swept away by cakes of ice.

Five fruitless days passed while the fuming colonel tried to establish a safe crossing. In his impatience Miles developed a waspish temper and a genius for getting in Baldwin's hair every time the harassed lieutenant tried to carry out orders. Thanksgiving Day found the lonely command huddled in snow-banked shelters on the banks of the turbulent wilderness river, more than a thousand miles from civilization.

HOPE of crossing had virtually been abandoned when word came that the Missouri was frozen

solid farther upstream. Taking half the command, Miles moved on 1 December, leaving Baldwin in command of three companies with instructions to return to Fort Peck. On his own at last, Baldwin moved with the speed and purpose characteristic of him.

At noon on 6 December he led his battalion into Peck after a rapid, four-day march. There he met Frenchy Brughiere, who had failed to induce Sitting Bull to come in but who had reported that the fugitive, with about a hundred lodges, was in camp on Porcupine Creek, within fifteen miles of the agency.

Allowing his tired men only a few hours rest, Baldwin marched at 2000 that night. The battalion—106 men, four officers, and two civilian scouts—was stripped for fast marching and armed for a showdown fight. Almost at once the column encountered Indian parties fleeing into the agency to escape Sitting Bull. From them Baldwin learned that the Sioux had left the Porcupine and were moving down to the Missouri.

Early next morning, as the column approached the river, Indian pickets appeared on all sides. One mounted warrior, later identified as the chief's son-in-law, Little Assiniboine, rode to within twenty yards of the rear guard but was allowed to escape. Because there were so many friendly Indians on the north side of the river, Baldwin had issued strict orders against any firing.

The troops deployed and advanced to the river bank without resistance, but when scouts tried to cross they were driven back by riflemen posted in the timber on the opposite shore. In the face of this fire one company swept across the ice in line of skirmishers and drove the Indians out of the woods to the hills beyond. The charge partly revealed their numbers and the great strength of the position among the bluffs.

Anxious as he was to settle the score with Sitting Bull, Baldwin was suspicious of the speed with which his adversary had withdrawn. Fearing a trap, he pulled back to the north bank and retired slowly down the valley, hoping to draw the Indians after him. After weeks of marching, freezing and poor rations, the Army had at last cornered its wily foe, only to be balked by lack of numbers.

HOWEVER it galled Baldwin and his men, the decision was sound. Sitting Bull had laid a neat ambush, which might well have ended in another Custerlike debacle. Unknown to Baldwin, the Indians had recently received reinforcements that raised their fighting strength to over six hundred.

Upon learning of Baldwin's approach, Sitting Bull had moved his village to the south side of the river and well back into the hills. Leaving a small covering force in the timber along the bank with orders to entice the soldiers into the trap, the chief had held the greater part of his warriors in ambush, ready to surround and annihilate his enemies. The desperate Sioux knew they would eventually be hunted down, but they intended

to make the kill expensive. Baldwin's refusal to be trapped indicates his knowledge of Indian tactics.

As Baldwin moved downstream, Indian scouts followed but did not attack. At the mouth of the little Porcupine the troops went into bivouac where they prepared to meet the expected rush. It was then late in the afternoon. The tired column had been marching and skirmishing for two days and a night with little food and almost no rest.

Just before dark a rising north wind—harbinger of a dreaded Montana norther—struck swiftly and without warning through the valley. In minutes the camp was enveloped in a lashing blizzard, with the temperature plunging in an alarming manner. Short of rations and with only one blanket per man, the fatigued and shivering troops were engulfed by a danger far more deadly than the threat of Sioux bullets.

Knowing that the cold would drive the Indians back to the shelter of their lodges and realizing that to remain where he was would mean freezing to death of his entire command, Baldwin ordered his men into ranks and back along the obliterated trail to Fort Peck.

THE history of the U. S. Army is studded with incredible feats of endurance under impossible conditions, but few marches equal the passage of this tiny column through the teeth of that howling storm. Even badly needed hourly halts were out of the question as it fought on into the screaming darkness. A minute's pause meant death to anyone who broke ranks.

Many did collapse from cold and exhaustion but were beaten to their feet and kept stumbling on. Baldwin and his officers raged up and down the column, hauling men out of the drifts, driving stragglers to their places in ranks and by their example and determination keeping the formation closed up and moving. Hungry, exhausted and all but asleep on their feet, the ragged, half-frozen soldiers trudged.

The tail of the blizzard, which had sent Fort Peck temperatures skidding to 35 below zero at the height of the storm, was still flicking drifts about the agency when the expedition staggered in at noon next day. Thanks to Baldwin's foresight in sending word ahead, the fagged and frostbitten men found tents, hot food, and warm dry bunks waiting. Except for twenty-five cases of frosted hands, ears and faces, the battalion had suffered no casualties and lost not a buckle of equipment. For the second time in twenty-four hours Baldwin had saved his command from annihilation.

Having satisfied himself on the condition of his men, Baldwin was eager to take the trail again. On 11 December, with the blizzard ended but the country still locked in freezing cold, he pushed on, heading for the Redwater valley where Sitting Bull was reported weathering the storm. Time was getting short; if he failed this time the campaign would probably be suspended for months.

Shoes and clothing were wearing rapidly under constant service. Men were already improvising buffalo-hide wrappings in place of worn-out boots, while ragged uniforms were patched. Clad in a motley of skins, furs and frayed uniforms, bearded and gaunt, the troops looked anything but the veterans they were. Only the flowing rhythm of their marching stride, their prompt reaction to calm but crisp commands, and the slant of their spotless rifles marked them as field-hardened, competent Regulars.

For nearly a week the battalion trudged on through the barren, snow-blanketed wastes. The going was so rough that mules were constantly breaking down. Unshod, subsisting on short rations carried in the wagons—grass was buried beneath the drifts—the thin and weakened animals could barely pull their weight. The column was delayed at one small stream for three hours while holes were chipped in the ice to enable the emaciated teams to keep their feet while crossing.

The Redwater was reached on 15 December. Tense with the realization that the long-awaited showdown was near, the column moved up the valley.

THE payoff, when it came, was so sudden that it was almost an anticlimax. On the afternoon of 18 December, while reconnoitering ahead of the column, Baldwin blundered upon Sitting Bull's hideout in the shelter of a branch valley. Had the unsuspecting Sioux maintained a proper guard Baldwin would have been discovered, for he was almost in the village before realizing what he had found.

Returning to the battalion, Baldwin deployed his companies for the attack. Creeping cautiously to the edge of the camp, the troops moved within easy range, then poured down in a shouting, driving charge.

The surprise was complete and overwhelming. Caught utterly off guard, the Sioux were driven into the hills, abandoning ponies, robes, lodges and all their camp gear. The troops pursued for six miles, then returned to clinch the victory by the heartless but cruelly effective procedure of burning the captured village.

Sitting Bull's helpless people, without provisions or ammunition and with nothing to fend off the bitter cold but the clothes on their backs, were adrift in the Montana winter. Broken and destitute, they straggled to the Canadian border to seek shelter with their northern cousins beyond.

Baldwin continued to serve against the Indians in the Northwest until their surrender at Pine Ridge Agency, South Dakota, in June 1891. He commanded the 4th Infantry in the Philippines against the insurgents in Cavite and neighboring provinces, and as colonel led the 27th Infantry in the Lake Lanao expedition against the Moros, culminating in the battle at Bayan on 2-3 May 1902. He got his star on 9 June 1902, returned to the States, and rounded out his career on 26 June 1906 at Oklahoma City.

Missile Monitor

A new and integrated electronic air defense system for fire control and coordination of batteries of Army missile battalions

T. E. Gootee

NEWEST addition to the modern equipment of the field army is a mighty but mobile electronic complex called Missile Monitor—an advanced means of defense against aircraft and missiles.

Geared to the high-speed, high-reaction demands of modern warfare, Missile Monitor is the world's first completely integrated, automatic, and electronic combat system especially designed for controlling and coordinating the fire of Army surface-to-air weapons.

For the field army, development of the Missile Monitor system is a singularly important step toward modernization of the Army's air-defense doctrine and

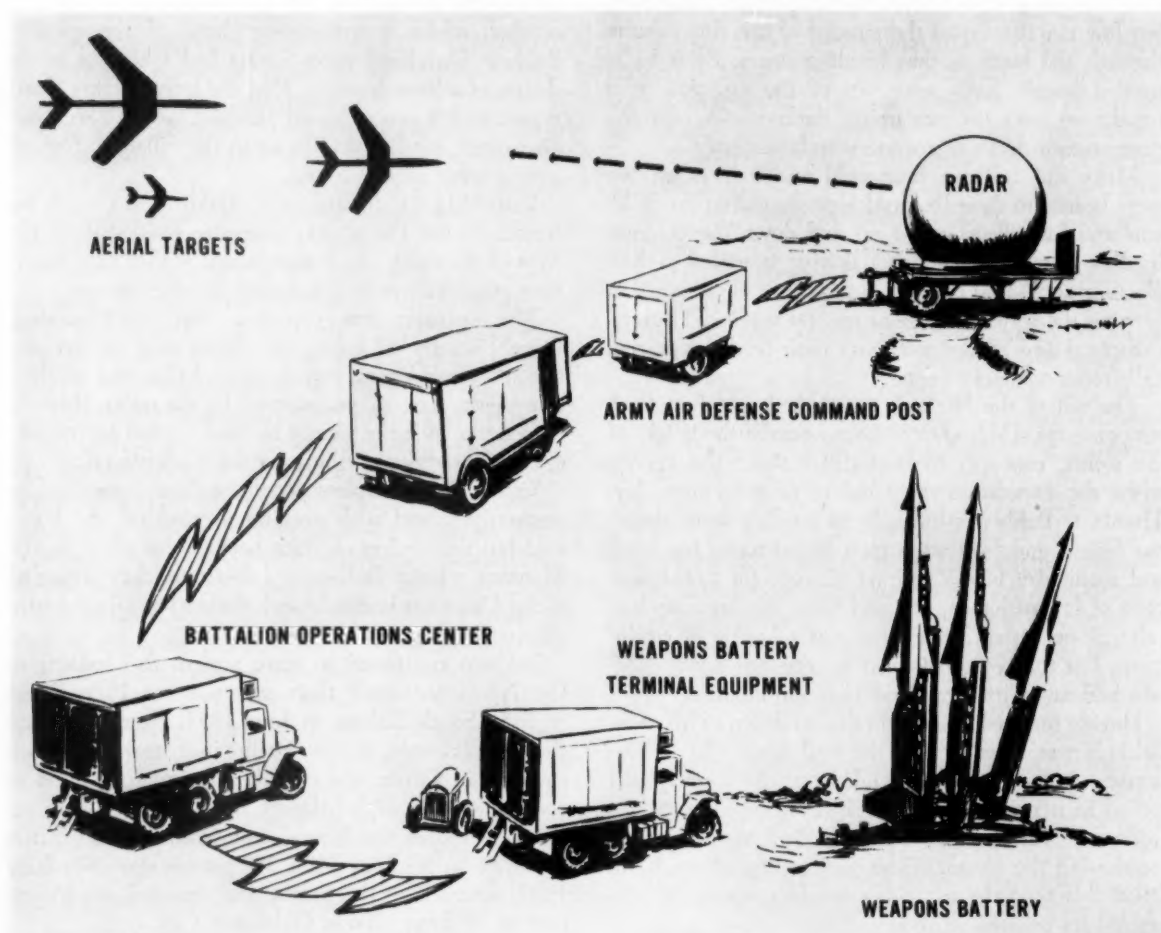
strategy. It brings to the field the split-second precision and micro-second speed of electronics coupled with that all-important element of combat: human judgment.

The system

Usually, the Army air-defense commander is responsible for a dozen or more batteries of missiles and similar weapons. Since frequently these batteries have overlapping fields of fire, completely coordinated action between them is imperative.

When aerial targets approach or are within his area,

Figure 1. *Missile Monitor is as mobile as the weapons it serves*



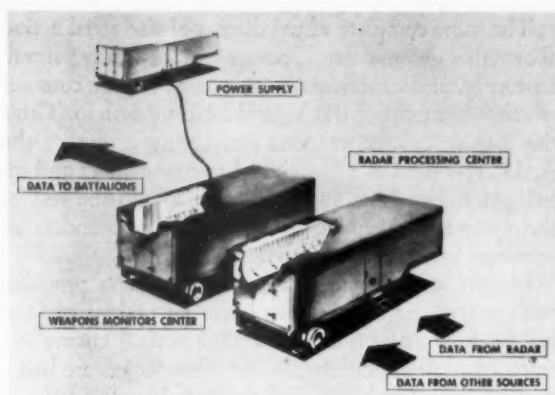


Figure 2. Army Air Defense command post

the air-defense commander must know instantly about their presence and their precise position. And he must know instantly about all actions taken by any of the weapons batteries protecting his area.

In turn, the commander of each weapons battery must also have speedy information about enemy targets. He too must know instantly what all adjacent batteries are doing in order to distribute effectively all air-defense fire in his area.

Finally, the air-defense commander must be able to assume complete control of any battle action that may develop suddenly in his area.

Because of the supersonic speed of modern air action, electronics provides the fastest positive method of assuring this necessary control and coordination of weapons batteries. And the system to do the job, developed under supervision of the U. S. Army Signal Corps, is Missile Monitor.

More than just a collection of complicated electronic equipment, Missile Monitor is a thoroughly integrated system—developed to maximize the probability of kill for any number or combination of enemy aerial targets within the defense area of a field army.

Targets can be selected easily and economically—with control of each weapons battery retained by the local battery commander. The system is essentially a combination of the latest automatic electronic equipment and of human supervision working together at the most critical points. In this way, the tremendous capacity of electronics for handling masses of information and solving complicated problems almost instantaneously is combined with the human judgment of trained operators and experienced commanders.

Despite the number, magnitude, and speed of its many accomplishments, all functions of Missile Monitor have been streamlined. Through micro-miniaturization, most of the technical components of the system have been physically reduced in size and weight.

To assure reliability and flexibility in combat, critical elements of the system are provided in duplicate. Operations can continue even when one or more major elements are damaged or fail to work.

As mobile as the weapons it serves, Missile Monitor is housed in a number of trucks and trailers—completely transportable. The system is flexible enough technically to serve various numbers and configurations of weapons batteries in an army missile defense unit—such as the battalion we describe here.

Principal elements of the system are shown in Figure 1. All are interconnected by wire and radio links—known as *electronic data processing networks*—for rapidly exchanging information concerning aerial activity and battery action in the area of a field army.

The AADCP: tracking

Key element and nerve center of the Missile Monitor system is the AADCP (Army air defense command post). This is essentially a radar processing center that also controls a surveillance radar and a weapons monitoring center (Figure 2).

Raw data about *all* aerial activity in the defense area are received, processed, and handled by the radar processing center. This information is the lifeblood of the Missile Monitor system, and may come from several sources.

Principal source of target information is a radically new type of surveillance radar (Figure 3) housed in separate nearby trailers. Protected by a large radome, the radar antenna rotates mechanically and electronically to provide three-dimensional radar coverage of the entire defense area. This eliminates the need for a separate antenna for height-finding. Also, with this new type of radar, all collected target information is reduced immediately to ground-rectangular coordinates—thus eliminating the need for mechanical plotting and facilitating the electronic transmission of such data.

Other sources of raw information are short-range radars of other elements of the Missile Monitor system—any adjacent AADCPs, and Air Force facilities that



Figure 3. Three-dimensional coverage from surveillance radar

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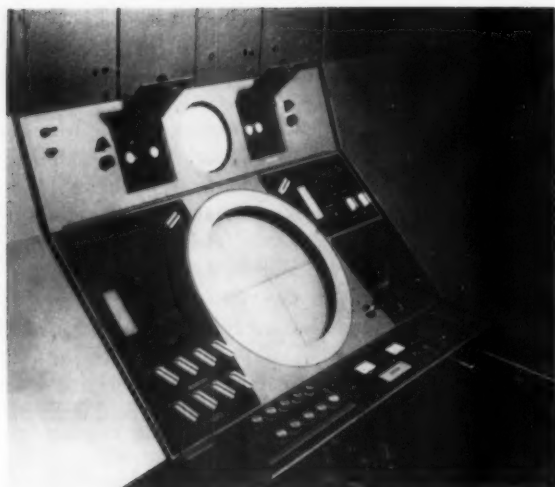


Figure 4. Targets are displayed on cathode-ray tube

supply available early-warning data on long-range targets.

There are two tracking computer and storage units at the radar processing center of the AADCP. Target information from the three-dimensional surveillance radar is fed into one unit with a storage capacity for many targets. All targets are tracked continuously and their positions constantly fixed by means of digital computers. Target information from other sources is fed into a second and similar storage unit with a larger capacity.

All this information is immediately at hand to the tracking operator, who can keep tracking either manually or automatically, by personal choice.

Selected targets are displayed visually on a large cathode-ray tube on the tracking console (Figure 4). This tube is also used for target detection and acquisition. Somewhat like a TV-receiver picture tube, its face depicts the geographical area being defended. Aerial targets appear as small "dots" of light on the exposed surface of the tube. By means of appropriate controls on the console, additional data concerning each target in the form of special marks or symbols can be superimposed on or near the target signal dot—much as shown in the drawing of Figure 5.

The AADCP: monitoring

Second major component of the AADCP is the weapons monitoring center, where the same incoming target data are also displayed on the cathode-ray tube of a push-button monitoring console for tactical evaluation and command monitoring.

Appearance of the console display resembles that shown in Figure 5 except that additional markings and symbols may be used to indicate other tactical and control information for the benefit of all elements of the Missile Monitor system. When a certain battery accepts or is assigned a particular target, a line is drawn electronically to connect that battery's location marker with the target's dot or marker.

The same complete visual display of the aerial action above the defense area appears automatically, simultaneously, and continuously on similar display consoles of other elements of the Missile Monitor system. Thus, the display in the weapons monitoring center of the AADCP is used as a blackboard to convey data and intelligence, by visual signs and symbols, to the rest of the system—particularly to the local commanders of weapons batteries in the defense area.

In this way, each battery commander is provided with everything he needs to select an appropriate target for his missile fire from among several enemy aircraft. In addition, he can also see what targets are being engaged by other batteries of the battalion.

If a battery commander selects a target for his missile fire, data concerning his local action are flashed at the battery site and appear immediately on the display consoles of all elements of the Missile Monitor system.

The commander of each weapons battery, accordingly, receives a continuous flow of fresh data through this system. At all times he knows what is going on in the air being defended by the field army. He also knows about what other weapons batteries of the battalion are doing.

Both the general air situation and the individual target selections of each battery commander are watched closely by the weapons monitoring center of the AADCP. Whenever necessary, tactical control of any weapons battery may be taken over by the AADCP in order to assign targets directly to selected batteries for quick kills or to terminate an engagement in order to avoid duplication of effort by adjacent batteries. This means of command control is decisive, particularly in the event of a mass raid by large numbers of hostile aircraft or missiles.

The weapons monitoring center, where such tactical evaluations and assignments are made, may be located near, or several miles distant from, the radar processing center of the AADCP.

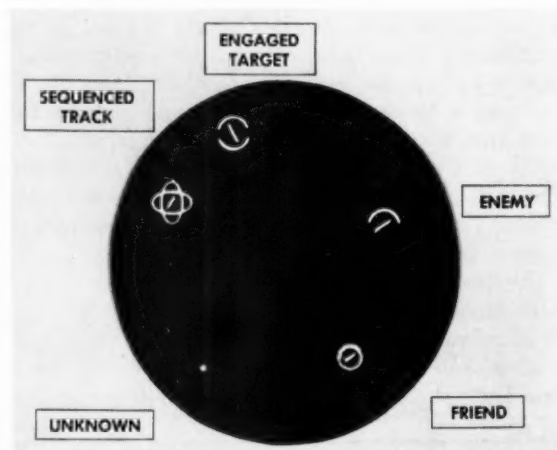


Figure 5. Symbols and markings used by the weapons monitoring center

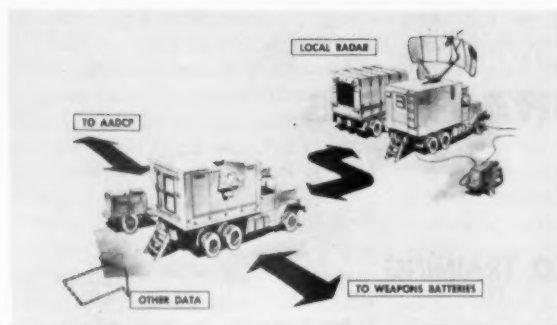


Figure 6. Battalion operations center

In the Missile Monitor system, the element connecting the all-important AADCP nerve center and the weapons batteries of a battalion is the BOC (battalion operations center).

Battalion operations center

In a typical defense battalion, a BOC (Figure 6) operates a short-range radar, and usually controls several weapons batteries.

Prime objective of a BOC is to permit the battalion, when employed independently or when cut off from the AADCP, to seize full operational control over all batteries of the battalion.

In addition to this stand-by or reserve role, the main functions of a BOC are to monitor all target assignments of the battalion's batteries, and to provide local radar coverage to supplement that of the AADCP.

When operating normally as a link in the Missile Monitor system, a BOC relays target assignments and monitors the operations of the battalion's weapons batteries. The BOC also receives target and other data from its own local radar and from tracking radars of individual batteries. It may be able to provide information on targets otherwise masked from the AADCP—for instance, due to blind areas in radar coverage. An electronic data processing network, independent of the AADCP and connecting the BOC with each of its weapons batteries, is utilized for exchanging data on engaged aerial targets.

Even under abnormal combat conditions, the BOC can act as an auxiliary assigner of targets to selected weapons batteries—thus relieving the AADCP of part of its burden.

Weapons battery terminal equipment

To integrate all weapons batteries of a battalion into the Missile Monitor system, each battery is provided with appropriate WBTE (weapons battery terminal equipment). These terminal facilities (Figure 7) are essentially a communications center in a van or trailer which carries data-link apparatus and related terminal equipment.

Visual displays of the unfolding aerial action as well as immediate activities of other weapons batteries in the defense area are received continuously through the

BOC and the AADCP of the system. These data go directly to the battery commander, as we have described.

Data on all target engagements by the weapons battery are transmitted from the WBTE through the BOC to the AADCP. These and other data are exchanged among elements of the Missile Monitor system through electronic data processing networks.

Schedule of progress

The original research required to establish a high-reaction automatic-electronic system like Missile Monitor was begun by the Army Signal Corps nearly a decade ago—at about the time of the first successful experiments with the Missile Master, big brother to the tactical Missile Monitor system.

Though somewhat similar in general function, there are major tactical differences and many significant technical differences in the two systems.

Missile Master is a fixed system of electronic air defense solely for the protection of key industrial and population centers of the Continental United States. Originally designed and developed by the Army Signal Corps, the system will have a number of large fixed stations, operated on a co-location basis by the Army and the Air Force.

Missile Monitor is a mobile tactical system of electronic air defense for a field army. Since weight and size are critical in combat, Missile Monitor's components include many new designs and engineering improvements. As a result, this all-Army tactical-type system bears little physical or technical resemblance to Missile Master.

Elements of the Missile Monitor system are being manufactured by the Hughes Aircraft Company of California, under contract with the Army Signal Corps. Allowing for refinements and improvements in some elements of the system, production in quantity for Army-wide distribution and employment should begin in the near future.



Figure 7. Weapons battery terminal equipment

THE MONTH'S CEREBRATIONS

STANDARDIZE NCO TRAINING

CAPTAIN ROBERT N. WEAVER

WHAT is our training program for noncommissioned officers? A great deal is being done, but the goals are vague, the results uncertain. We have unit schools, post schools and service schools for noncommissioned officers. Each course in the instruction is aimed at a particular MOS, and attendance is either voluntary or compulsory. Except for the leadership training course prescribed in AR 350-90, all are technical schools. This sounds as though the instruction at these schools is more than adequate, but I think close examination and evaluation will reveal an expense which, for the results obtained, would not be condoned in any other profession.

Within units and at posts, organizational duplication results through the establishment of separate schools for each job to be learned. Each school gets the required number of instructors to carry on classroom work, enough administrative personnel to supervise and maintain operations, and training facilities adequate for housing all phases of the instruction. In the interests of economy, these groups are usually kept to the bare minimum, so each school must operate on a shoestring.

Next, duplication occurs from one post to another. Each post commander is inclined to establish his own set of schools that teach the subjects he wants learned, each believing he is doing the job a little better than is being done elsewhere. But with what result? Frequently, the fact that a soldier gets a certain type of training at one post is never considered when he reaches a new station, where the same training is repeated. This demoralizes the candidate because he feels his time is being wasted, and the commander who resents operating a unit that is constantly short-handed.

How do noncommissioned officer academies fit into the picture? Here

we encounter the first attempt at standardization in teaching enlisted leaders the intangibles of leadership, long a basic prerequisite in officer training. But here again, interpretation of the standard is as varied as the personalities of the commanders. One academy builds classrooms to order from the ground up; another sets up an easel in a vacant messhall. At one academy students are inspected daily along OCS lines; at the next they are set up in bachelor enlisted quarters with maid service. At one place the academy's commandant rates the rank of colonel, while another has a first lieutenant in the same job. AR 350-90 does prescribe about 50 per cent of the instruction program, and it does say "An individual who has successfully completed a course at a Noncommissioned Officer Academy which meets the criteria established herein will not be permitted to attend another such course."

These are steps in the right direction, but how does the commander of one installation know whether the academy at another "meets the criteria established?" This is partly answered by the requirement that "a notation will be made in paragraph 26 of DA Form 20 . . . for each individual who successfully completes a course at a Noncommissioned Officer Academy." However, that AR is dated 25 June 1957, and academies have been operating in one form or another for years.



Am I blowing a smoke cloud over nothing? Last year, the programmed cost for operating the noncommissioned officer academy at one post in CONUS was \$221,032, including salaries of the cadre, cost of expendable supplies, training-aid construction, and reproducing training handouts. Although this cost was not formally programmed, nevertheless it represents the expense of operating such a training establishment at one post. At this post were these additional schools, in permanent operation: CBR, medical specialist, clerk-typist, projectionist, small-arms maintenance, wheeled-vehicle maintenance, tracked-vehicle maintenance, basic airborne, jumpmaster, air transportability, and Army education center. This is a lot of schooling conducted at considerable cost. I think better organization could improve these schools and reduce their combined cost.

First, why not establish a post school command? Authorize a table of distribution for its staff and faculty to insure continuity in policy, instructional material, and standards required. This administrative headquarters would organize, supervise and support all formal instruction at that post. Such a step would materially reduce the number of people needed for mess, supply, personnel and office records, and supervisors. It would enable the post to have more classes, use fewer rooms, barracks and training aids. This is not empire-building, but rather eliminating several empires through consolidation.

Secondly, courses should be prescribed by Department of the Army in order to effect standardization throughout all commands. It should remain the post commander's prerogative to determine which courses are needed. Army and theater commands would check to insure the prescribed standardization of courses. It follows then that attendance at any course could be recorded in the soldier's personal records, and thereafter be recognized by

his succeeding commanders.

These two steps are only a beginning toward establishing a complete training program for our noncommissioned officers. Under the present scheme they are still pretty much expected to learn their profession in the school of hard knocks.

Why have we been reluctant to establish a school system that is tied to the career pattern of the noncommissioned officer, as we have done for the officer? The officer attends a basic branch course at the beginning of his career, to thoroughly orient him in the duties of a company officer. Why not a comparable course for the noncommissioned officer candidate? This could be tied to the three-to-five-year service bracket, and promotion to E-5 could depend upon graduation. To a certain extent this is already recommended in AR 350-90, and the curriculum now

prescribed for academies is basically what should be taught there. For my part, I would prefer a course of eight weeks instead of four, embracing a combined-arms phase of instruction. This course should be branch immaterial, at installation level.

After that we would owe him the same consideration we show the officer as he becomes fit for higher command and staff positions. An advanced noncommissioned officer school should be established to prepare the most promising for grades E-7 to E-9. Those selected would attend this school during the eight-to-twelve-year bracket, and again promotion could depend upon graduation. Let's conduct this course at service school level and aim 50 per cent of the curriculum at personnel management policies and administrative procedures. The other half could be devoted to up-to-date and

proposed material relative to the candidate's branch.

Am I talking really big money? A drop in the bucket compared with what we now spend to achieve no set standard or goal. By contrast, we would have a system around which the soldier could plan his career, and a product which would enable unit commanders to really go back to the leadership technique of issuing mission-type orders.

Captain Robert N. Weaver, Infantry, was commissioned in the Reserve and integrated into the Regular Army in 1953. In addition to serving as Commandant of the Fort Bragg Noncommissioned Officer School during 1957-58, he has completed liaison visits to similar schools at Forts Meade, Belvoir and Campbell, the 3d Infantry Division, and Seventh Army in Germany.

A JOB FOR THE SERGEANT MAJOR

CWO J. R. NICHOLSON

NOW that we have elevated the sergeant major to rank above all other noncommissioned officers, how about taking a good look at his job, his authority and responsibility? What does the Army team expect from the sergeant major?

The title is an old and honorable one. Everyone knows that the sergeant major is the outfit's senior, most important and most responsible noncommissioned officer, its strongest and most experienced. In former times the sergeant major's job fully measured up to his title and all that it implied. In a pre-World War II regiment the sergeant major was the leader of its noncommissioned officers. His prestige was preeminent and unchallenged. Old-timers will tell you his influence could be felt. If he didn't actually run the regiment, his advice on enlisted matters was sought and accepted. He was the principal assistant and advisor to the adjutant, who in turn was the regimental commander's principal assistant and advisor. In fact, for a long time the adjutant was the only staff officer.

The reorganizations that began during World War II, however, have greatly changed and limited the scope of the sergeant major's authority and responsibilities. Since the adjutant no longer is the principal and closest ad-

visor to the battalion or battle group commander, the sergeant major's position has been correspondingly reduced. Now the executive or the S3, depending upon personalities, is closest to the Old Man, with S4 not too far away.

Army Regulations 611-201 does not face the realities of changed conditions. A noncommissioned officer's opportunity for responsibility and influence depend largely on how close he is to the main line of command. In the Old Army almost everything went through the adjutant; now almost everything that makes or breaks a combat unit passes through S3. Still, AR 611-201 defines the sergeant major as "the principal enlisted assistant to the adjutant." This means, of course, that the sergeant major belongs in the adjutant's office and works for the adjutant. There he is supposed to:

This department is designed to accommodate the short, pithy and good humored expression of ideas—radical and reactionary, new and old. We pay for all contributions published but you deserve to be put on notice that the rate of payment depends upon the originality of the subject and the quality of writing rather than length. This department is hungry for contributions, so shoot that good idea in . . . today.

Form the unit for drill (he never forms a whole battalion or battle group); receive reports (by telephone, not face to face); assist at inspections (usually he is left behind to answer the phone); furnish answers to higher headquarters (except where training, intelligence and supply are concerned, and they are eighty per cent of the work); coordinate and direct personnel and administrative functions (not in a battalion, where there's a personnel officer and a staff); supervise and direct the preparation of rosters (personnel section does this), schedules (S3 does this), reports (everyone but the sergeant major does this), correspondence (a little) and orders (personnel section again).

Read that paragraph again. The duties listed are almost entirely those of the first sergeant!

During combat the operations sergeant and the supply sergeant (and the intelligence sergeant) will have twice the responsibility, will do three times the work, and will have much more influence. They will be directly concerned with winning the war, while the sergeant major will be relegated to headquarters rear along with the administrative records.

This needs correction. If the sergeant major belongs at the top of the pay-and-rank heap, he must also be where the enlisted work, responsibility and influence are greatest.

Start out by giving him a paragraph of his own in AR 611-201. Make the sergeant major the principal enlisted assistant of the *unit commander or executive*. Finally, give him duties that definitely bring him in close touch with the Old Man, where the matters of greatest command importance pass by. As a starter, how about these?

(1) Actively supervise and inspect the performance of subordinate enlisted leaders.

(2) Perform such other inspections of unit activities as prescribed by the commander, especially matters of daily routine, such as interior guard and police.

(3) Hold periodic sergeant major's

or first sergeants' call to publish information on subjects normally within the sphere of the enlisted leaders' responsibility.

(4) Accompany the commander on inspections, visits, and during ceremonies, as directed.

(5) In coordination with interested staff agencies, advise the commander on matters concerning the enlisted personnel of the unit.

(6) Be the president of the unit's senior NCO council.

(7) Participate in troop formations as prescribed by the commander.

(8) Represent the commander at meetings of the board of governors of the NCO open mess.

(9) Supervise the commander's personal enlisted staff and be responsible for the security of the commanding officer's person, documents and property.

(10) Participate actively in the indoctrination of new arrivals. Be the chief instructor in military courtesy, customs of the service, and local regulations.

Chief Warrant Officer J. R. Nicholson, now administrative assistant to the Chief of Staff, 3d Armored Division, was a sergeant major, personnel officer and adjutant during World War II, and an assistant adjutant of a corps in Korea and a regiment in Germany.

RECOVER ARMY-TRAINED TECHNICIANS

MAJOR ROBERT C. LUTZ

THE backbone of the Army is no longer only the noncommissioned officer; it's the noncommissioned officer *and* the technical specialist. The training of specialists entails extensive expenditures of time, personnel and facilities, followed by varying periods of practical on-the-job apprenticeship. Because of their cost, they are referred to by personnel's people as "critical MOSs."

Let's face the fact that we aren't retaining these key people in service. They become negative statistics on an outfit's reenlistment record while elsewhere we are busily training other men to replace them. Attrition and reenlistment statistics are not necessary to prove how keenly the Army feels its losses. We have only to mention some of the inducements to retain these men: reenlistment bonuses, specialist programs, frozen promotions in overcrowded career fields, reenlistment interviews and lectures, grace periods during which they can reenlist without loss of bonus and rank, and now proficiency pay.

I think we should adopt some device whereby a larger percentage of our Army-trained specialists can be recovered after they have returned to civil life. Here is my proposal.

The ninety-day reenlistment grace period following an enlisted man's discharge is not adequate. Some young men take advantage of it, but the great majority had been counting the days until they became civilians. The grass looked so green in those pastures back

home that while in service they failed to notice what the Army has to offer. By the time they reflect and compare, the ninety days have slipped by. Some never reflect at all, and are caught up in the dizzy merry-go-round of making ends meet in civilian life.

Instead of only ninety days, why not a time limit that varies directly as the Army's need changes for each critical MOS? The Pentagon projects its anticipated MOS requirements as a matter of routine in determining draft quotas and service school attendance. The need by specialty at any given time should determine the re-up grace period, and regulate the terms of its reenlistment offer.

Specialized skills are an expendable commodity, subject to many variables which tend to enhance or diminish their values with the passage of time. But surely most critical skills could be profitably recovered at least twelve months after discharge. For some electronics skills which have civilian applications, the recovery period may well be measured in years. Also, some type of refresher training may be required.

Of course, we should try to recover only those specialists whose skills are in demand. But within a certain field some men are more highly skilled than others. How can these degrees of skill be determined and utilized?

Here is where the reenlistment interview can be put to real use. Surely a commander knows the worth of his men. As a routine part of his interview, each soldier's potential worth to the Army as leader or technician, by

grade and MOS, can be catalogued or classified. If he chooses not to reenlist, this classification, along with reserve unit assignment, home address, and other details, could be entered on a form and forwarded to the Pentagon for periodic review.

With the data at hand, and knowing expected shortages by grade and MOS, Department of the Army can determine which men it will attempt to reenlist and at what rank. If the need becomes critical enough, a bonus might also be offered. Where men reenlist to fill their own vacancies, care would have to be taken to insure that none would be offered as much to return to service as they receive who never left it.

Once we have selected by name, MOS and potential worth those whom we hope to reenlist, the next step is to make the offer. Write him a letter? No. An official letter is cold and impersonal, and faintly reminiscent of a draft "greeting." Instead, use the local recruiting sergeant. Give him all the details and have him make the Army's offer a person-to-person affair. Given a sixty- or ninety-day acceptance period, the recruiter can also follow up. He can further advise the Department, through personal knowledge, when to drop the prospect from further consideration. Through this method the list of key personnel can be kept up to date and reasonable in size.

Imagine the potentialities when the recruiter, with a firm offer in his pocket, can say: "The Army needs *you*. Because of your qualifications, and

your excellent service record, the Army offers you a [such-and-such] rating and an adjustment allowance of [so many] dollars. It will move your family to any of these posts after you complete a six-week refresher course."

If he passes the physical exam, another Army-trained specialist is back in uniform. Since he won't need another sixteen weeks of basic training, and long-term schooling, almost his entire enlistment can be devoted to useful, productive work. Further, after two enlistment periods certainly this soldier will seriously consider a service career. The longer such men remain, the fewer short-term technicians we need to train. With fewer to train, the number of students at service schools can be reduced.

Obviously, with savings in money, manpower and facilities made possible by employing such a scheme, even a modest percentage of acceptances can make it pay. Aside from dollar savings, there is the more important gain of broadening the technically qualified elements of the professional Army. Specifically, more Army backbone!

We can use a modified scheme for officers. Losses among Regular Army

officers are of sufficient concern that a general must interview each company-grade officer who resigns. Once they doff uniform, however, no further attempt is made to recover them.

In view of the training investment involved, why give up on the day an officer leaves? Why not also review their records, and offer to reinstate those officers selected, based on the Army's needs? These officers too should pass the physical exam and would lose some seniority, but we must return them to Regular Army roles. Here too only a modestly successful program would justify the administrative effort.

A recruiting program such as I propose, designed to recover a greater number of Army-trained specialists, can make maximum use of existing means by utilizing the reenlistment interview to determine potential worth of each man who declines to reenlist. It adds information on potential worth to existing Army records. It utilizes the present recruiting force to reenlist key men.

The only additional steps required would be a comparison of the Army's needs against the potential reenlistment pool to determine which men

we want back in service, and the specific offer the Army is willing to make.

Such a recruiting program would be more efficient because it would meet our current needs by MOS. The Army could hand-pick the specialists it wants. The recruiting system could concentrate on people the Army knows it wants. We could keep the master list up to date through periodic personal reports from the recruiting force. The program aims at quality, not quantity.

The more successful this program the greater its savings in reduced turnover among personnel, less training of replacements, and increased esprit, morale and efficiency. Quality will attract more quality.

The taxpayer expects our modern Army of machines and men to protect him in peacetime and to defend him in wartime. Let's give him his money's worth.

Major Robert C. Lutz, Artillery, recently joined the Matériel Department, Artillery & Missile School. A former enlisted man and USMA graduate, he served with 2d Division Artillery in Korea. Major Lutz has had considerable experience with missiles.

THE CHARACTERS GUIDE THEMSELVES

CAPTAIN BEN L. HARRISON

CHARACTER guidance has been one of the least successful programs in the Army, our battle group commander told his officers at one of our weekly officers' calls. He put it rather mildly, I thought. Considering the time, money, and stress placed upon it, I think character guidance has been a failure in itself and a thorn in the side of many a company commander.

The basic idea is excellent. The goal of character guidance is unquestionably noble and worthy of unusual endeavor. The program, in my opinion, has failed to achieve its goal. The need is now more urgent than ever for any program that will strengthen our democratic ideals, enhance personal honor and integrity, and give the soldier a strong, solid, personal will to fight—to reject surrender and continue the fight when capture is imminent. A workable character guidance program can help achieve this goal and frustrate Communist brainwashing.

Our battle group commander and our chaplain tried a new approach that

I think is working. On the last Monday of each month the chaplain shows the following month's Character Guidance film to all officers. This usually takes about six minutes. He then hands out suggested conference outlines that include questions, examples, and an occasional anecdote to promote discussion of the month's topic. The examples and stories are usually about privates or noncommissioned officers. The chaplain, and sometimes the CO, suggests specific ways of putting the point across to the soldier and how to tie it in with his daily life, his unit and the Army at war.

Now here is the new gimmick. When the company is scheduled for character guidance the company commander takes charge. The chaplain introduces the film and runs it. The company commander comments briefly on the topic and splits the company into its organic platoons. Actually, the platoon leaders conduct the conference. These platoon conferences are quite surprising. The troops when in small groups such as these enter into lively discussion. (Hot arguments

might be more descriptive of some instances!) Properly controlled by the platoon leader, the conference stimulates a great deal of really worthwhile thought. By participating in the conference the soldiers and their leaders find themselves going on record, so to speak, as to their personal principles and ideals with a public acknowledgment of their responsibilities.

When the company is reassembled the platoon leaders report the results of their discussions. The chaplain and the company commander summarize and close the conference.

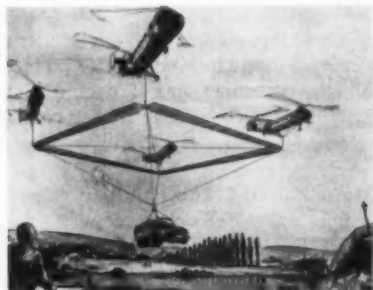
It's not as easy as marching the troops to the theater for a fifty-minute nap, but just try it a few times. You'll soon find you are better satisfied with the results.

Captain Ben L. Harrison, Infantry, is S1 of the 2d Battle Group, 31st Infantry. Commissioned in 1951 after serving as an enlisted man, he has been military personnel psychologist, para-trooper, aide de camp, assistant S3, company commander, Army aviator, and instructor at two service schools.

Irons in the Fire

Copters Team for Cargo Lift

A "Multiple Helicopter Heavy Lift System" is being worked out for the Army by Vertol Aircraft Corporation. The idea is to harness teams of two to six helicopters for short lift of heavy military vehicles and weapons in forward combat areas. Aluminum alloy spreader



Helicopters teamed to lift heavy payloads

frames are attached to the helicopters by ten-foot suspension cables and allow the aircraft to keep their distance. Longer sling cables extend to the equipment. An electrical release system enables each helicopter pilot to uncouple all members of the team in routine operations or in an emergency.

Lightweight Vehicles

A family of air-transportable vehicles is being developed by Food Machinery and Chemical Corporation under an Army contract. Members of the family include transporter-erectors for the Little John and Pershing missiles; an air-droppable armored personnel carrier; and command vehicles. As many as 15 types of vehicles are contemplated, some designed for helicopter lift, others for lifting in medium or heavy cargo aircraft like the C-130 and C-133. The company also is developing the Nike Zeus sustainer engine in conjunction with the Grand Central Rocket Company, and is producing the Hawk erector-transporter.

Noise-Maker Tests Nose Cones

Ear-splitting noise—more than 163 decibels, like a million auto horns blaring at once—is being used to test nose-cone parts for the Titan and Minuteman ICBMs at Avco's Research and Advanced Development Division at Wilmington, Mass. Sound vibration is a hurdle that must be overcome in order for an ICBM to re-enter the earth's atmosphere and hit its target, and the noise-making system duplicates in the laboratory the noise

level a missile encounters in flight. Sensitive electronic components can be sent off-beam by sound vibrations both at the launching and in the downward plunge of the nose cone. The tests will reveal the effect of super-noise on missile components.

Cat-Eyed TV Camera

A closed-circuit television camera that can transmit an image taken in almost total darkness has been demonstrated by General Electric Company. The camera does not rely on an infrared light source. The glow of a cigarette lighter in a completely dark room emits enough light for the camera to transmit a clear picture. It can be used in military surveillance and detection, and can be mounted on jeeps, trucks or aircraft.

Radar Mortar Locator

A new, highly mobile, trailer-mounted radar system, capable of pinpointing enemy mortars more than six miles away, has been developed jointly by Signal Corps R&D Laboratory and General Electric Company's Heavy Military Electronics Department. Designated the AN/MPQ-4A, the mortar locator detects the mortar shell in flight and electronically computes the exact location of the origin of firing, permitting immediate, accurate counterfire.

The MPQ-4A can be set up in 15 minutes and can be operated by one man. The an-



Radar that can detect a mortar shell in flight and locate enemy positions for counterfire features a highly mobile, trailer-mounted system.

tenna system scans enemy mortar areas, radiating two narrow beams of radio-frequency energy. Energy reflected from a mortar shell passing through the two beams is picked up by the antenna and transmitted electronically to the radar display panel.

Radio Command Receiver

A ten-channel radio command receiver, less than 35 cubic inches in volume and three pounds in weight, has been developed for the Army Ballistic Missile Agency by Motorola's Military Electronics Division. Fully compatible with existing system components, the miniature receiver-decoder represents more than a three-to-one reduction in size and weight over pres-

Aerial Research Jeep



The Army's VZ-8P aerial research jeep developed by Piasecki Aircraft Corporation recently made its first flight. It rose vertically from the ground on two columns of air and hovered under its own power. The aerial jeep is the first vehicle in the VTOL field to utilize two small horizontal ducted propellers within the body to achieve both vertical lift and horizontal flight. Two rotor props, in front and rear, are completely shielded on all sides, offering a compact vehicle with low silhouette and a high degree of safety. It was designed in response to Army need for a vehicle with utility of the ground jeep and hovering and flying capabilities of a small copter.



An improved version of the World War II mine clearing "Snake," developed by Army Engineer R&D Laboratories, is field-tested. The 400-foot aluminum snake is pushed into the minefield and detonated by machine gun fire from the tank into a bullet-sensitive fuze. Specially designed charges provide improved mine-clearing performance with less explosive. It is made by Allison Steel Company, Phoenix, Arizona.

ent equipment. In operation, ten command functions can be controlled by the system.

Over-the-Hill Radio Extended

A new electronic device that will enable O/H (over-the-horizon) radio links to be extended 100 miles beyond the present 250-mile limit has been announced by International Telephone and Telegraph Corp. O/H radio employs microwave signals reflected off the troposphere to span great distance with-

out intermediate relay stations. The systems transmit telephone and television and other forms of commercial and military communication. The device may eventually provide military users with less expensive equipment and greater distance per O/H link.

Pierces Dark, Clouds, Fog

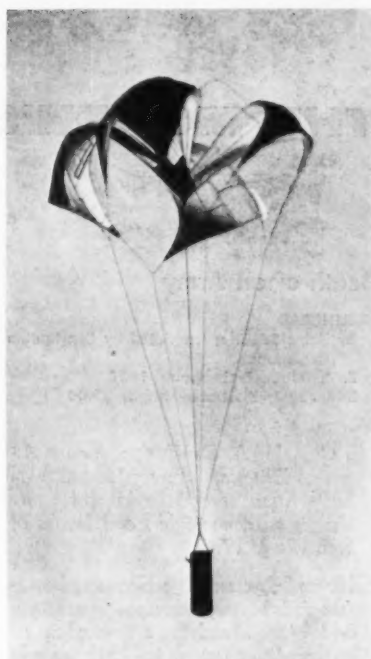
An airborne radar system that produces clear, detailed ground maps despite darkness, clouds or fog, has been announced by Philco. The lightweight, all-weather system will be used in advanced drone reconnaissance aircraft, and is compact enough to be used in most operational aircraft. The system uses a new signal processing technique known as "REDAP." Philco's Government and Industrial Division is building eight of the system for the Army Signal Supply Agency under a \$2.5 million contract.

Radar Tracks Hot Clouds

Tests made by the Signal Corps show that the Army's advanced weather radar system may spot and track nuclear clouds with relative accuracy. During high-yield tests, the Army's radar measured the size and plotted the course of "hot" clouds, tracking them for as long as two hours. A special advantage of radar is that it works during darkness and low visibility. Information on the height and drift of radioactive clouds, obtained through radar, would provide fallout warning to troops on atomic battlefields, and would be vital to civil defense in nuclear warfare.

Rotating Parachute Tested

A radically new rotating "Vortex Ring" parachute will soon go into production by Pioneer Parachute Company, a subsidiary of Reliance Manufacturing Company. The chute is designed for paratroop and air-cargo drop



Rotating "Vortex Ring" parachute

operations, for missile recovery and for ground braking of aircraft. The device has been company-tested and has shown great inherent stability, low shock effect on opening, and virtually no swing or glide effects. This would permit better pinpointing of drop zones for troops or cargo. Rate of descent is comparable to conventional chutes, using 60 per cent less cloth area, and offering twice the drag efficiency. The standard 32-foot Vortex Ring chute weighs only eight lbs. It is being service-tested.

HOT SPARKS

A new battlefield fingerprinting process that instantly produces a tissue-thin, durable cast of direct or latent prints has been developed by Army Quartermaster Corps for assuring positive identification of war dead.

Testing of the Army's new experimental 338-foot shallow-draft cargo vessel took place in November off the West Coast. Designated BDL (Beach Discharge Lighter) 1-X, the vessel is powered by two 110-hp diesel engines and can discharge cargo on the beach in four-foot depths. It has a landing displacement of 2,340 tons and a seagoing displacement of 4,126 tons.

"Guns" deliberately designed to explode are used by General Electric to help scientists and engineers develop missiles and space vehicles. Using high explosives as propellants, the guns help provide the hypersonic velocities needed to test missile and space vehicle models. GE's Missile and Space Vehicle

Department has been awarded a contract by Aberdeen Proving Ground to study the gun's possibilities as a research and testing tool.

Lightweight, hot-weather clothing has been developed by Quartermaster R&D Command to protect troops against heat rays from an atomic blast. The experimental uniform consists of an outer layer of fire resistant poplin, a middle layer of polyethylene spacer fabric, and an inner layer of T-shirt material.

Lockheed Aircraft's California Division has presented design proposals to the Army for an advanced vertical-rising research airplane. The aircraft would combine tilt-wing and deflected slipstream features with a lowered thrust line and conventional propellers for maximum simplicity and performance. The plane is designed to take off and land like a helicopter, fly like a fighter, and operate at treetop level.

Dr. John W. Dawson, who helped organize the Ordnance Missiles Laboratory at Redstone Arsenal, and formerly was Chief of the Research Division of the Laboratory, is now Chief of Ordnance Research.

A follow-on contract for more than \$2 million for additional remodeled L-23 aircraft has been awarded by the Army to Beech Aircraft of Wichita, Kans. The remodeled aircraft will be powered by 340-hp Lycoming engines and will be equipped with new electronics, accessories, systems, interior styling, and other advanced features.

The Army's Lacrosse guided missile will soon join the Canadian Army. Canadian troops recently finished training in Lacrosse maintenance at the Ordnance Guided Missile School at Redstone Arsenal, and have been training in Lacrosse operations at Fort Sill and Fort Bliss.

THE MONTH'S BOOKS

Death of an Army

STALINGRAD

By Heinz Schröter; translated by Constantine Fitzgibbon

E. P. Dutton & Company, 1958

263 Pages; Illustrated; Maps; \$5.00

Reviewed by

LT. COL. H. A. DEWEERD, former Associate Editor of *Infantry Journal*, who has written several books and many articles on commanders and battles of both World Wars.

Heinz Schröter was a German photographer and military correspondent during World War II, and for a time editor of *Westfront-Illustrierten*. In 1943 he was asked by Dr. Paul-Josef Goebbels, Reich Propaganda Minister, to write the story of German Sixth Army's advance to Stalingrad and its final encirclement and surrender. Official documents were placed at Schröter's disposal, but his book when completed, was regarded as "intolerable for the German people" and its publication forbidden. After the war Schröter rewrote the book with the assistance of survivors of the Soviet POW cages. The result is a dramatic half-historical and half-novelized account of great power and persuasion. Schröter's language, even in translation, often is lush and purple.

His theme is an epic one. In the summer of 1942, Sixth Army advanced toward Stalingrad. It consisted of 22 German divisions under Colonel General Friedrich von Paulus, who had worked out some of the staff problems for the initial plan of attack on the Soviet Union. Sixth Army ultimately worked its way into the outskirts of Stalingrad, and Hitler boasted that no power on earth could drive it back. Before long, however, Hitler's reluctant allies—Rumanians, Italians, and Hungarians—on its flanks had been swept aside like chaff and Sixth Army, prevented from fighting its way out of the Stalingrad trap by Hitler's orders and Paulus's vacillations, finally was annihilated. Of 330,000 men who marched into the battle, less than 10,000 returned to Germany from imprisonment in the Soviet Union. The rest died on the snow-covered battlefield or in captivity.

In telling of the harrowing struggle of Sixth Army to beat off the Russian attacks which finally overwhelmed it, Schröter is torn between one desire to

throw all the blame for the disaster on Hitler and upon General Paulus for refusing to disobey his Führer's orders and make a breakout attempt, and another desire to make the relatives of Sixth Army victims feel good by asserting that its resistance really saved the entire southern wing of the German forces. To his way of thinking: "Without the sacrifices of the Sixth Army the building up of a new front might not have been possible, and this would have resulted in the inevitable destruction or surrender of an army counted in millions." Thus Stalingrad is described as "not a military necessity but a mistake by the Supreme Command." At the same time, it is described as an action which saved the southern front in late 1942 and early 1943. Obviously, the training the Nazis gave Schröter as a propagandist was not wasted.

For a time the encircled Sixth Army put faith in Der Führer's promises of support and relief. Then on 23 December 1942, a new chief signals officer, Colonel van Hofen, arrived from the Army of the Don, which was supposed to be relieving the forces at Stalingrad. To the bewildered Paulus he brought word that far from preparing to advance, the Army of the Don actually was in retreat. To this news Paulus could only reply: "They wouldn't lie about a matter such as this! The lives of hundreds of thousands of men are at stake." They wouldn't, but they did!

Schröter believes that one of the real authors of the Stalingrad disaster was Reichsmarschall Goering, who promised that his air force would supply the Stalingrad garrison with 500 tons a day. Goering forced an honorable officer, General Jeschonek, to bring this assurance to Hitler against his own better judgment. General Zeitzler ridiculed the proposition, but Hitler wanted to believe what the usually reliable Jeschonek said. He accepted the Luftwaffe plan for supplying Stalingrad. On 16 August 1943, after the Sixth Army disaster and after reproaches from Goering, Jeschonek shot himself. The Luftwaffe made a valiant effort to supply Stalingrad, even though it failed to achieve anything like what Goering promised. In doing so it lost 536 transports, 149 bombers, 123 fighters, and more than 2,000 airmen.

The soldier-reader will find much in this book that rings true to life. A Rus-

sian plane drops a small bomb on the main supply depot of LI Corps. Burning gasoline spreads to ammunition and to food stores where 45 barrels of butter go up in smoke along with thousands of rations. The big flap which follows at headquarters is not produced so much by the loss of desperately needed stocks of ammunition and food, but because the supply vouchers necessary for an itemized statement of losses cannot be found! He will also find much that rings true in the soul-searching struggles of German officers to reconcile their military orders with a concern for their men.

Paulus got his promotion to field marshal just before he surrendered. The last radio signal from his headquarters at Stalingrad was received at 0545 on 12 February 1943. It said: "This station will no longer transmit."

This is a very interesting book with many fresh insights about the battle. As most readers of ARMY well know, Field Marshal Paulus soon went on the Russian radio as a speaker for the Free German Officers Movement. He now lives in East Germany.

The Study of Military Affairs

PUBLIC POLICY: Problems of Defense

Edited by Carl J. Friedrich and Seymour E. Harris

Harvard Graduate School of Public Administration, 1958

169 Pages; \$2.00

Reviewed by

MAJOR THEODORE WYCKOFF, Artillery, who completed graduate study in international relations at Princeton in 1957, and is now in the Office of the Chief of Military History.

An interesting addition to the literature in the field of military affairs is this yearbook of the Harvard Graduate School of Public Administration. It contributes five articles of unusual academic sophistication to this rapidly expanding field of study.

These articles are not recommended to the casual or beginning reader in the field; but to the student who is prepared to delve into unexplored areas of military theory they offer some very interesting food for thought.

The collection begins with the intriguing "A Typology of Military Organization," a think-piece by M. D. Feld, Research Associate in Harvard's Defense Studies Program. Endeavoring

to build a conceptual framework on which to hang every military organization—from Caesar's legions to the Pentomic army—Feld hypothesizes that all armies in history can be classified according to their structure, their policy base, policy role, social model, "self-image" and other criteria. When thus classified, he identifies five types of army: the "externally dominant" or imperial army of Rome or nineteenth century Britain; the "internally dominant" or feudal army of medieval Europe; the "closed equality" or national army of nineteenth century Prussia; the "open equality" or representative army of the U. S. today; and the "ideological equality" or totalitarian army of contemporary USSR.

The second essay is a study of "Arms Races: Prerequisites and Results," by Samuel P. Huntington, Assistant Professor of Government at Harvard, well known to military men for his thought-provoking *The Soldier and the State*.

Third and fourth are two essays dealing with two facets of a subject of ever-topical interest: the rise and decline of the arms and services under the impact of technological change. Harry Rowe Ransom's "The Politics of Air Power: A Comparative Analysis" provides an interesting contrast to Edward L. Katzenbach's very entertaining essay, "The Horse Cavalry in the Twentieth Century: A Study on Policy Response."

The concluding essay, "Sir Winston Churchill on The Military Requirements of Great Britain," by Pamela N. Winch of Boston University, is a succinct and enlightening survey of basic British military thinking: the traditional reliance on the Navy as the first line of defense, the modification of this position as a result of the rise of airpower, and finally the consequent relative downgrading in the over-all British defense structure of the ground army.

Throughout the volume there is food for thought and fuel for discussion for all wearers of the Army green.

U. S. Raw Materials

RAW MATERIALS: A Study of American Policy
By Percy W. Bidwell
Harper & Brothers, 1958
403 Pages; Illustrated; Index; \$5.95

Reviewed by

PEREGRINE WHITE, a contributor to *ARMY*, who is Scientific Information Officer in the Office of Ordnance Research, U. S. Army.

National policy in the field of raw materials forms a vital segment of discussion, analysis, and controversy on Capitol Hill and in various Government buildings from Foggy Bottom to Pennsylvania Avenue. To many readers the subject is special and remote. However, as Percy Bidwell makes clear, it is tremendously important.

During the last 50 years the United States has ceased to be in the position of producing within its borders practically all the basic materials needed by industry, with some even abundant enough to permit export. Today we use nearly 40 per cent of the Free World's output of basic materials. Moreover, the leading sources of supply of many of the newer materials used in electronics and in alloys capable of withstanding high temperatures come from abroad. These are such materials as tantalum, columbium, cobalt, manganese, chrome, and beryl.

Mr. Bidwell brings together in one place a summary of raw-materials policy, raw-materials crises, as they have evolved during recent years. He draws substantially on the leading bible on this subject, the report of the Paley Commission (President's Materials Policy Commission) of 1952. Many other sources, Congressional reports and investigations, and the like, are cited. This is a source book, with an extensive bibliography for those who would go farther. Its value would appear to lie not in its originality of approach, but in the extensiveness with which relevant influences, innumerable data charts, and clearly stated historical matter are brought together.

The history of raw materials during the postwar decade, Bidwell points out, displays the virtues and defects characteristic of American democracy. In times of emergency, wonders of improvisation. In times of peace, failure of policy to achieve results at minimum cost. Meanwhile, the underlying changes in our raw-materials demands continue to evolve, in a world neither at peace nor at war. Possibly this book will aid policy-makers to ponder the lessons of history, rather than, in the years ahead, reliving it.

Standing Room Only

OVERPOPULATION: Twentieth Century Nemesis
By Col. Alexander J. Stuart
Exposition Press, 1958
240 Pages; Illustrated; Index; \$4.00

BRAVE NEW WORLD REVISITED
By Aldous Huxley
Harper & Brothers, 1958
147 Pages; \$3.00

Reviewed by

LT. COL. NORMAN LOCKSLEY, Artillery, who wrote this magazine's only article on demography (July 1953).

In this work Colonel Stuart brings his own analysis and study to bear on the same problem described by Malthus 160 years ago. As a capsule approach to a critical and sobering problem, Colonel Stuart's book is chock full of facts and figures. It presents essentially a let's-have-the-facts approach to a tough problem. But in presenting the materialistic view

of history and population, the other side of the picture is, perforce, omitted. And that is, of course, man's soul. The Crusades, other great religious conflicts, and many of history's mass movements simply do not fit the pat materialistic explanation of population pressure alone. Whatever the cause-and-effect relationship, authorities agree that the threads are tangled indeed. This work presents one aspect.

One omission on the brighter side lies in the great increase in man's knowledge. It, too, is multiplying at a geometric rate. According to Ellis O. Johnson, head of Operations Research Office, man's knowledge in the physical sciences is doubling about every twelve to fifteen years. If you can't communicate with your teen-age kids, this may provide an explanation. At any rate, this growth pattern may give us solutions as well as problems. Farther along this line of reasoning, the author omits the "break-through" implications of some recent discoveries: atomic energy, automation, electronic data-processing, for example. These represent not merely progress along a trend line but a real quantum jump into a higher order of activity.

It is entirely possible that some of these recent discoveries or others still to come will give man the tools to overcome his greatest enemy—himself. Man got himself into this situation. It is not beyond the bounds of possibility that new discoveries and techniques will ease the problem, while creating new ones all the time. A real you-can't-win proposition.

For anyone interested in a detailed and sincere warning, Colonel Stuart paints a somber, staid and single-minded picture.

When Aldous Huxley wrote *Brave New World* back in 1932, his fantasy of life in the future pictured a world as antiseptic and orderly as a hospital ward. Smoothly and inexorably, everybody ran on his appointed way from birth to death. The novel described life in the twenty-sixth century: completely organized, deodorized, managed, "adjusted," full of "togetherness"—and just plain dull.

Compared with the earlier book, *Brave New World Revisited* is neither a sequel nor another novel. This is a slim volume of essays commenting on the forces at work today that, to Huxley, seem to be driving us into his brave new world; only much faster than he had anticipated.

First specter around the corner is overpopulation. This factor, says the author, is the No. 1 reason for the ultimate loss of freedom in the future. Pressure of numbers will propel nations into dictatorship faster than anything.

Next step: how the dictators grab the reins. Through the use of propaganda, "mass manipulation," brainwashing, tranquilizers, subliminal perception and hyp-

nopaedia. (This last is sleep-teaching; like the World War II experiments in Morse code instruction, when records were played to students while they slept. Certainly an effortless way to learn—if it works.)

What to do about the grim outlook? Nothing very new: birth control, education, legislation, improvement in food and raw materials technology, and fostering the desire for freedom. He ends on a wistful note: "Perhaps the forces that now menace freedom are too strong to be resisted for very long. It is still our duty to do whatever we can to resist them."

Climbing down from Cloud 8, there are a few reservations about accepting all the points raised in the book. First, I doubt that the arts of manipulation are quite as perfect as Huxley feels. Nor do I feel that the Singing Commercial is much of a menace as yet, to anybody except parents.

No, the time to become really worried will be when TV sets and radios don't have any "Off" buttons. Until then, the wide range of choices open to free people will serve as a balancing factor against one-man control.

Although readable, stimulating and well written, this little book suffers from too much solemnity and viewing-with-alarm. If you're a pessimist, it will confirm your outlook; if you're an optimist it probably won't change you. After all, the world has been going to the dogs for a long time.

To Write as You Speak

A NEW WAY TO BETTER ENGLISH
By Rudolf Flesch
Harper & Brothers, 1958
117 Pages; Index; \$3.00

Reviewed by

DR. JULIUS SEGAL, psychologist and freelance writer, who is Coordinator of Research Information at George Washington University's HumRRO.

Take the most effective speaker, put pen and paper before him, and often he is struck dumb. Or, if he does dare to set his ideas down, the result is frequently a series of boring and pompous sentences. Like as not they induce in the reader irritation or sleep.

Why does this happen? Why do good ideas get botched in the writing? In his newest book on the art of good writing, Rudolf Flesch explains it this way: Many of us just refuse to write as we speak. The result is unspeakable English.

The military writer is no exception. Pentagon in-baskets are burdened daily with memorandums and staff studies that read as if the U. S. income-tax instructions were used for a model. Short sentences are avoided like the plague. Easy words are never used when hard ones

can be found—or invented. Footnotes to footnotes dance along the margins of each page.

For those who want to reform, Flesch has some helpful suggestions. His book even offers practice exercises to help the word-logged writer breathe the free air of fluent English. No frills. No fuss. Just plain English, written in a casual, friendly way. His examples are delightful: from Toynbee to *Time*, from Macaulay to *McCall's*. Flesch's own writing is a model of clarity and style.

In writing this review I tried to reflect that style by using as many of Flesch's helpful hints as I could. (He encourages the use of the first person singular, by the way.) I don't think I succeeded altogether. What I think I could do, though, is to rephrase the opening paragraph of this review in the way Flesch begs us *not* to write. It might go something like this:

One is likely, time and again, to encounter erudite, persuasive thinkers of supraliminal intelligence who—whether through heredity or environment—simply cannot effect communicative prose. The probabilities are good (although how good, exactly, there are no incontrovertible data to demonstrate) that the written efforts of such individuals are weary, stale, flat and unprofitable. [Grateful acknowledgment is made to W. Shakespeare for the use of the last five words.] Except under the most extraordinary circumstances, their output is irksome and—in some instances—even results in a state bordering on insensibility.

Do you manage to comprehend the message? Or, better yet, get the point? If you do, you owe it to yourself to get this book. If you don't, better get two copies.

Dusted-Off Dispatches

ONCE THERE WAS A WAR
By John Steinbeck
The Viking Press, 1958
233 Pages; \$3.95

Reviewed by

CAPT. CHARLES B. MACDONALD, Infantry, USAR, whose combat experiences with the 23d Infantry (2d Infantry Division) are recorded in the classic *Company Commander* (1947).

This is a collection of sixty-six short dispatches selected from those sent by Mr. Steinbeck to American newspapers during the early stages of World War II. They are, in the main, behind-the-front observations from England, North Africa, Sicily, and Italy.

The author's reasons for dusting off the dispatches are somewhat obscure. "For what they are worth," he says, "or for what they may recapture, here they are, period pieces, fairy tales, half-meaningless memories . . . a sad and jocular

recording of a little part of a war I saw and do not believe, unreal with trumped up pageantry. . . . They are as real as the wicked witch and the good fairy, as true and tested and edited as any other myth."

Mr. Steinbeck's thesis is that the war correspondent operated under so many restraints, some self-imposed, some imposed by the military, some by the readers themselves, that his dispatches bore no true relationship to what the war was like. But this particular collection, he seems to say, is valid because it mirrors the false emotions, the postures which we all adopted in the name of something noble called the War Effort.

Unable to believe that the work of all war correspondents was so seriously affected by restrictions or has been so cruelly treated by *Time*, this reviewer sampled some of the dispatches of the late Ernie Pyle. Their sole value, it can be reported, is not to preserve a myth. While they may perpetuate an occasional distortion, in the aggregate they mirror with clarity an experience which was real, terrible, and meaningful to the men who went through it. In more respects than not, they tell us what it was really like.

The simple fact in regard to Mr. Steinbeck's collection is that, during and since World War II, many who saw a great deal more of war than did Mr. Steinbeck have set down their impressions, not in prose as inimitable perhaps, but with considerably more understanding and perception.

Post-Mortem on Leaflets

THE FLOW OF INFORMATION: An Experiment in Mass Communication
By Melvin L. DeFleur and Otto N. Larsen
Harper & Brothers, 1958
302 Pages; Illustrated; Index; \$4.50

Reviewed by

LT. COL. PAUL M. A. LINEBARGER, MI, USAR, who was an Army member of the Overseas Planning and Intelligence Board, Overseas Branch, Office of War Information, which coordinated U. S. propaganda between Washington and theaters of operations.

Unreadable to laymen and so specialized that it is almost completely impenetrable to users of ordinary English, this book summarizes a great deal of valuable and expensive Air Force research. The authors have chosen to communicate about communication to communication experts, and they have succeeded. Generals of the future are going to ask questions about the effectiveness of psychological warfare techniques. It is not likely that the generals will have read the book, but they would be wise to have experts who *have* read it.

Behind the scientific correctness and the academic gobbledegook, this work

carries out an important military mission. It reconnoiters the messages which come out of leaflets into human eyes and get relayed by human mouths to human ears. It sets up coldly scientific procedures which will make it possible to do much more effective leaflet research in the future than in the past. It does not tell us what we will find out in any future situation, but it lays down scientific standards whereby we can go about the process of tracing "the flow of information" more carefully and more responsibly than ever before. The famous professor, Leonard D. White, pointed out two years ago that the social sciences are getting better and better at explaining more and more about less and less in the field of human behavior, and this book exemplifies the narrow-aperture, sharp-image technique at its most brilliant. The work concerns the general framework of Professor Revere, an over-all Air Force research job in the field of mass communication.

The authors conclude by providing a concise and very illuminating shop talk on "trends in communication theory and research." This alone is worth the price of the book, since it summarizes a great deal of new thinking, almost all of it couched in painfully new terms. Whether the outsider likes it or not, they have gone beyond the limits of ordinary intelligent communication.

The authors have made a real contribution to their field. It is more a comment on our culture than it is on them that we cannot ask them to communicate about communications in a language which was good enough for Thoreau, Emerson, or Holmes, but which does not meet the requirements of professional in-group defense imposed by an age emphasizing the brahminic character of the Ph.D. Special languages antedate totem poles, and it is interesting to see the intrusion of cryptic speech into a relatively simple field of human relations. Perhaps America needs its own Hu-shih to teach our emergent mandarins to speak plainly.

Catastrophe in Flanders, 1917

IN FLANDERS FIELDS: The 1917 Campaign

By Leon Wolff

The Viking Press, 1958

308 Pages; Illustrated; Maps; Index; \$5.00

Reviewed by

BRIG. GEN. DONALD ARMSTRONG, USA,
Retired, who attended four French Army schools and was attached briefly to the French Fourth Army in 1918.

Even before Sir Douglas Haig started his offensive in Flanders in 1917, many resounding and powerful voices, military and civilian, were raised against the proposal. Most powerful of all was Lloyd George's opposition to the idea. It is curious that the Prime Minister felt un-

able to stop the campaign. It is more curious that Haig believed he could win single-handed a victory that would drive the German Army from the submarine bases on the Belgian coast. What is by far the most curious in the basic planning for his campaign was Haig's belief that after the breakthrough, the cavalry would clean up in a glorious renaissance of Napoleonic or earlier tactics.

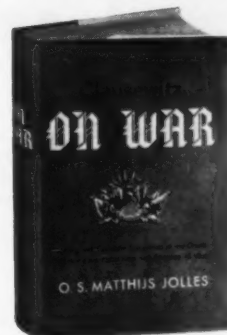
In the event, both the time and the place, the tactical methods and the assumptions on which planning was based were all proved to be wrong. The terrain, except for the low ridges, was reclaimed swampland. With the help of heavy rains which had been predicted, the violent artillery bombardments in the successive attacks returned the land to its pristine state. The machine guns in undamaged pillboxes were always there to greet the courageous but doomed British infantrymen struggling through the Belgian quagmires. When at last Haig admitted he could advance no farther, a few pitiful square miles had been gained at probably the highest price in blood and treasure ever paid for real estate mostly under water. Certainly the tactical and strategic gains were inconsequential.

Those of us who were in the First World War will never forget the devastation of these Flanders fields. Leon Wolff, an Army Air Forces officer in World War II, in this notable book repeoples those fields with the hundreds of thousands who there lost their lives, and tells how and when and why the swampy terrain, the hostile mud and enemy bullets proved the miscalculations of the late British Field Marshal. Assuredly few readers will fail to agree wholeheartedly with the opinion expressed by Major General J. F. C. Fuller in his introduction that: "This is an outstanding book, the most fascinating I have read on the period reviewed. It is much more than a military history, rather an invocation which summons out from the depths of the past the catastrophic year 1917."

We have Mr. Wolff's extraordinary skill as a writer to thank for this achievement. The story of 1917 on the Western Front has often been told, but no writer before Mr. Wolff has merged truth and art so effectively. We know the beginning, the middle, and the end of the story; yet the reader feels a sense of urgency and suspense as he moves away from the Nivelles fiasco over Messines Ridge and along the Menin road pursuing the will-o'-the-wisp policy of victory by attrition.

This dramatic narrative will inevitably fascinate the general reader. For the professional soldier of today, the minute examination of a conservative military mind in this book will suggest many a warning which must be heeded.

Clausewitz...



ON WAR

TRANSLATED BY

O. S. MATTHIJS JOLLES

No military student is educated, no officer is competent for higher command or staff duties, until he has read and re-read *On War*.

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REPORT FROM YOUR AUSA CP

This Association is now a co-sponsor of the Institute of American Strategy. The Institute conducts annually a National Military-Industrial Conference. The next Conference will be held in Chicago during 6-8 April 1959.

Reference is made to the Annual Election procedure which was explained in "Report from Your AUSA CP" in the December issue. The Nominating Committee of the Council of Trustees has submitted the following slate:

For President: Maj. Gen. A. J. Drexel Biddle, TAG of Pennsylvania

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In accordance with the established procedure, the names of additional candidates may be submitted, to arrive at National Headquarters prior to 2 February 1959. Such submissions must comply with the provisions of the published procedure.

In accordance with the provisions of Resolution No. 1, relating to the Army Ordnance Missile Command, the President of this Association transmitted the Resolution to the President of the United States after the conclusion of the Annual Meeting. Receipt has been acknowledged. After study in the Department of Defense, a decision was announced which continued the ABMA under Department of Army control.

As a result of a survey which we started last summer, we have received many suggestions and comments relating to the activities of the Association. These have been extracted from the letters, consolidated by category, and are being analyzed. Those which can be implemented, based upon available personnel and funds, will receive first priority. The remainder will then be studied to determine what will be required to adopt them.

WALTER L. WEIBLE
Lt. Gen., USA, Retired
Executive Vice President

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Veterans Day meeting at Fort Richardson treated civilian and military members to demonstration of Army aviation (including film on the subject), paratroop of troops, and static displays including aircraft equipment, survival gear, and several weapons undergoing arctic tests. More than 80 members from Anchorage were flown to the meeting by H-21. Dinner, business meeting, and Veterans Day observances completed the program. Company A, 1st Battle Group, 26th Infantry, was host for the dinner.

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Charter meeting held at Post Theater No. 3, Fort Gordon, 18 November. Lt. Gen. Clark L. Ruffner, CG Third U. S. Army, made principal address, tying in necessity for a strong Army with the requirement for a strong AUSA to educate those in and out of the service in the Army's needs. Col. Arthur Symons, USAR, Secretary of AUSA, presented the charter to Mr. Pierce C. Blich, president of the chapter. Chapter is receiving strong support of the Augusta civilian community.

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COLUMBIA RIVER CHAPTER—*Secretary:* Col. Robert M. Kerr, Tooze, Kerr, Hill and Tooze, 811 Equitable Bldg., Portland 4, Oregon. *President:* Mr. Claude F. Palmer; *First Vice President:* Mr. Roy N. Vernstrom; *Second Vice President:* Brig. Gen. Owen Summers, Rtd.; *Treasurer:* Mr. Donald R. Smith.

COLUMBUS-PHENIX CITY-FORT BENNING CHAPTER—*Secretary-Treasurer:* Col. John F. T. Murray, U. S. Army Staff Judge Advocate, Fort Benning, Georgia. *President:* Mr. J. W. Woodruff, Jr.; *First Vice President:* Mr. M. R. Ashworth; *Second Vice President:* Mr. Henry B. Pease; *Asst. Secretary-Treasurer:* Lt. Col. S. H. Abernathy.

Senator Richard B. Russell assured the Chapter at meeting 14 November that he would continue his fight to have an Army of not less than one million men. In a speech that received press mention from coast to coast, Senator Russell praised the Army missile program, asserted that the Army required airlift, and noted the excellent community relations enjoyed by Fort Benning and the surrounding area. Mr. James W. Woodruff, Jr., Chapter President, reported on AUSA's 1958 Annual Meeting. The Infantry Center Chorus, under direction of PFC Irving Corvert, provided entertainment for the occasion. Attendance included 605 members, plus guests. Among the



CHATTANOOGA, TENN. The November supper-meeting of Moccasin Company in honor of new members.



POITIERS, FRANCE. Newly elected officers of Poitiers Chapter, elected at the December meeting. Left to right, seated: Major Paul E. Baker, Second Vice President; Col. Fielder P. Greer, President; Lt. Col. Paul J. Leahy, First Vice President. Standing: Major Norman H. Wampler, Secretary; Capt. R. E. Stone, Treasurer.



FORT RICHARDSON, ALASKA. Clad like true Alaskans, Col. M. R. Marston (left) and William Stranberg, members of Alaska Southern Chapter, land at Fort Richardson to attend a special meeting held there. Civilian members were flown from Anchorage in H-21 copters of the 80th Transportation Company. CWO Randa A. Schuman, pilot, lends a hand.

guests was the Hon. E. L. Forrester, Member of Congress from the 3d District, Georgia.

DALLAS CHAPTER—Secretary: Mr. Theodore E. Jones, 3812 Purdue, Dallas, Texas. President: Mr. Lloyd S. Bowles; First Vice President: Mr. Harold F. Volk; Second Vice President: Mr. N. J. DeSanders, Jr.; Treasurer: Mr. Ben H. Wooten.

DES MOINES CHAPTER—Secretary-Treasurer: Lt. Col. Clyde Putnam, USAR, 720 Des Moines Building, Des Moines, Iowa. President: Col. Harold E. Pride; First Vice President: Lt. Col. Willard Hayne; Second Vice President: Lt. Col. William Leachman.

DETROIT CHAPTER—Secretary: Mr. William Travis, 1501 Beard, Detroit 9, Michigan. President: Col. Gervais W. Trichel; Vice Presidents: Mr. Harold R. Boyer, Mr. Carl F. Bachle, Mr. Don Pippel, Mr. Herbert R. White; Finance Chairman: Mr. Fred W. Parker, Jr.; Corresponding Secretary: Mr. Harold J. Miller; Treasurer: Col. Robert Bruce.

DIX CHAPTER—Secretary: Capt. John P. Tamraz, Fort Dix, New Jersey. President: Lt. Col. Allen R. Henderson; Treasurer: MSgt Albert Lang.

EAST BAY CHAPTER—Secretary: Col. Earl W. Huntting, USAR, Insurance Securities Trust Fund, 2030 Franklin, Oakland 12, California. President: Mr. Arthur C. Ames; First Vice President: Maj. Gen. William F. Dean, USA-Rtd.; Second Vice President: Lt. Col. John M. Fowler, USAR; Treasurer: Lt. Col. John A. Dutro, USAR.

Chapter staged reception 16 October for Lt. Gen. C. D. Palmer, CG, Sixth U. S. Army, at Oakland Army Terminal. More than 40 elective officials from the community attended, with Chapter members and guests.

8th INFANTRY DIVISION CHAPTER—Hq 8th Infantry Division, APO 111, New York, New York. President: Brig. Gen. William F. Train; Vice President (Bad Kreuznach Area): Lt. Col. John J. Dunn; Vice President (Mainz Area): Capt. Thomas C. Fleury; Vice President (Baumholder): Capt. Joseph P. Kingston; Vice President (Sandhofen): Lt. Col. Charles R. Thomas; Secretary: MSgt Charles T. Root; Treasurer: Maj. James F. McLean.

EL PASO CHAPTER—Secretary-Treasurer: Lt. Col. E. W. Breese, USAR, 528 E. Yandell Drive, El Paso, Texas. President: Lt. Col. Paul O. Lance; Vice Presidents: Mr. Raymond H. Dwigans, Mr. George Hubbert.

11th AIRBORNE DIVISION CHAPTER—APO 112, New York, New York. Honorary President: Maj. Gen. Hugh P. Harris; President: Col. A. R. Taylor; First Vice President: Lt. Col. Edgar R. Fenstemacher; Second Vice President: MSgt Abel J. Fernandez; Secretary: MSgt Russell A. Steinkuehler; Treasurer: Capt. George A. Peters.

FORT DEVENS CHAPTER—President: Lt. Col. Robert C. Harris; Vice President: Maj. Glenn N. Mayo; Secretary: Capt. R. S. Moriarty; Treasurer: Maj. Margot Reis.

FORT LEE CHAPTER—Hq Quartermaster Training Command, Fort Lee, Virginia. President: Col. Elmer M. Burns; First Vice President: Dr. Howard W. Hembree; Second Vice President: Col. Alexander G. Eagle; Secretary: Lt. Col. Earl M. Bradley; Acting Treasurer: Lt. John A. Larson.

Chapter held combined dinner-meeting with local chapters of the Reserve Officers Association and the Quartermaster Association 21 November. The Hon. George H. Roderick, Assistant Secretary of the Army for Financial Management, made the principal address. Attendance was more than 420; many members present held membership in all three organizations.

FORT LEONARD WOOD CHAPTER—Secretary: Capt. James C. Kesteron, Building 401, Fort Leonard Wood, Missouri. President: Mr. Dru Pippin; First Vice President: Mr. Dale Bradford; Second Vice President: Mr. Rudy Weber; Treasurer: Lt. Richard J. Kelloff; Asst. Secretary-Treasurer: SFC August H. Meyer.

FORT RILEY-CENTRAL KANSAS CHAPTER—Lobby Entrance, Summerall Hall, Fort Riley, Kansas. President: Mr. John D. Montgomery; First Vice President: Mr. Ralph Wareham; Second Vice President: Mr. Charles S. Arthur; Executive Secretary: Mr. Blair D. Adam; Treasurer: Mr. Ed J. Rolfs, Jr.; Recording Secretary: MSgt Kermit H. Selvig.

Chapter members, including Sergeant Selvig, Recording Secretary, made addresses in the surrounding towns on Veterans Day. The Chapter is making plans to effect a smooth transition of membership as the 8th Infantry Division rotates from Germany.

FORT SHERIDAN CHAPTER—Hq Fort Sheridan, Illinois. Acting President: Major Dale E. Williams.

FRANKFURT CHAPTER—Secretary: Capt. David S. Parkhurst, Hq 4th Armor Group, APO 757, New York, N. Y. Honorary President: Lt. Gen. F. W. Farrell; President: Col. R. F. Blankenship; First Vice President: Lt. Col. Kay K. Cowan; Second Vice President: 1st Sgt Edwin S. Gardner; Treasurer: Maj. C. W. Coyne.

Meeting 19 September featured Mr. Aaron Coleman, Frankfurt Security Officer of the U. S. Escapees Program, who spoke on a subject related to his assignment.

GENERAL JOHN J. PERSHING CHAPTER—Armory, 2000 N. 33rd Street, Lincoln 3, Nebraska. President: Lt. Col. Jack D. Anderson; First Vice President: Lt. Col. Harry A. Stearns; Second Vice President: Lt. Col. John E. Boyd; Secretary: Major Allen Tintzman; Treasurer: Maj. Harvey A. Ochsner.

GEORGE WASHINGTON CHAPTER—Secretary: Mr. Henry Handler, 409 Perry Street, Fairfax, Virginia. President: Dr. Roland R. Kirks; First Vice President: Gen. Jacob L. Devers, USA-Rtd.; Second Vice President: Mr. Warren R. Smith; Treasurer: Lt. Col. John P. Kelly.



FORT GORDON, GA. After-dinner chat at the Fourth Annual Meeting of the Augusta Area Chapter in November. Left to right: Hon. Millard Beckum, Mayor of Augusta; Lt. Gen. Clark L. Ruffner, CG, Third Army; Col. Arthur Symons, USAR, National Secretary; Col. Paul T. Snowden, post commander.

GREATER LOS ANGELES CHAPTER—Secretary: Lt. Col. Otto A. Nelson, S2, Headquarters, Fort MacArthur, Calif. President: Lt. Col. Jack M. Warner, Jr., USAR; First Vice President: Col. Joseph H. Pengilly; Second Vice President: Brig. Gen. James C. Cairns; Treasurer: Gen. A. J. Maxham, CalNG Res.

HAWAII CHAPTER—Association of U. S. Army, Box 100, APO 958, San Francisco, Calif. President: Gen. Kendall J. Fielder, Jr., USA-Rtd.; Vice Presidents: Gen. F. W. Makinney, AG, HNG; Col. P. H. Johnston, Jr., USAR, and Mr. Ernest Albrecht; Secretary: Major Charles D. Flinn.

HEADQUARTERS SEVENTH U. S. ARMY CHAPTER—c/o Secretary of the General Staff, Headquarters, Seventh U. S. Army, APO 46, New York, N. Y. Honorary President: Lt. Gen. C. D. Eddleman; President: Col. William F. Ragland; First Vice President: MSgt Raymond E. Griffith; Second Vice President: Maj. Harold W. Humphrey; Secretary: Lt. Col. Sidney C. Brockman; Treasurer: SFC Richard L. Roy.

HEIDELBERG CHAPTER—Hq USAREUR, APO 403, New York, New York. President: Brig. Gen. E. F. Penat; First Vice President: Col. M. P. Brooks; Second Vice President: MSgt F. J. Bennett; Secretary: Capt. Vernon M. Eppley; Treasurer: Capt. C. H. Lively.

HENRY LEAVENWORTH CHAPTER—614 Delaware Street, Leavenworth, Kansas. President: Lt. Col. Harold Purdy, USAR; First Vice President: Mr. John W. Breidenthal; Second Vice President: Col. Edward C. Dunn; Secretary: Lt. Col. Cecil C. Helena; Treasurer: Mr. George H. Ryan.

Regular fall dinner meeting held at Officers Club on 4 November. Speaker was Lt. Gen. Arthur G. Trudeau, Army's Chief of R&D.

HUB OF THE SOUTH CHAPTER—Secretary: Col. George E. Baya, 699 Ponce de Leon Avenue, N.E., P.O. Box 1736, Atlanta 1, Georgia. President: Mr. Parks Hunt; First Vice President: Dr. Allen Albert; Second Vice President: Mr. Edgar J. Forio.

INDIANA CHAPTER—Secretary: Maj. Kenneth W. Button, Hq Finance Center, U. S. Army, Indianapolis 49, Indiana. President: Maj. Gen. John W. McConnell; First Vice President: Maj. Walter J. Schuchmann; Second Vice President: SFC Jack W. Griffin; Treasurer: Maj. Jack K. Elrod.

KELLEY BARRACKS CHAPTER—Attn: SGS, APO 107, New York, N. Y. President: Col. Homer B. Chandler; First Vice President: Lt. Col. J. P. Barry; Second Vice President: MSgt Herbert Carney; Secretary: CWO James Lynch; Treasurer: Capt. J. D. Wightman.

KENT-SUSSEX CHAPTER—P.O. Box 643, Dover, Delaware. President: Lt. Col. Joshua T. West; First Vice President: CWO Edward R. Knight; Second Vice President: MSgt Russell E. Donovan; Secretary-Treasurer: Lt. Col. Oliver J. Cejka.

KENTUCKIANA CHAPTER—P.O. Box 92, Fort Knox, Kentucky. President: Col. Arthur C. Bonnycastle; First Vice President: Mr. J. Ed Pepperman; Second Vice President: Col. S. D. Slaughter, Jr.; Secretary: Maj. Bentley B. Mackay, Jr.; Treasurer: Capt. Robert J. Levitt.

These officers elected and installed 9 October. Old and new officers combined to hold a luncheon in honor of Maj. Gen. Paul A. Disney, CG, U. S. Armor Training Center.

LAKELAND AND POLK COUNTY CHAPTER—P.O. Box 3218, Lakeland, Florida. President: Maj. William L. Gunnett; First Vice President: Col. H. W. Buchanan; Second Vice President: Lt. Louis E. Schrader; Secretary: Mr. Stephen L. Kellaher; Treasurer: Sgt William F. Payne, Jr.

LOS ALAMOS-SANTA FE CHAPTER—Secretary: Maj. Joy E. Fincke, USAR, 2139-A 48th St., Los Alamos, New Mexico. President: Lt. Col. John F. Weinbrecht, USAR; First Vice President: Lt. Col. Samuel P. Davalos, USAR; Second Vice President: Maj. Carl A. Freeman, USAR; Treasurer: Maj. Harry D. Wise, USAR.

MACON COUNTY CHAPTER—Secretary: Capt. Richard G. Derby, Adjutant, Decatur Signal Depot, Decatur, Illinois. President: Col. A. B. Foley; First Vice President: Capt. R. E. Creek; Second Vice President: Maj. C. E. Berg.

Dinner meeting in Decatur was attended by the Mayor of Decatur and members of the Military Affairs Committee of the Association of Commerce. Col. Benjamin W. Yowell, G1 of XI U. S. Army Corps (Reserve) was the principal speaker. Lt. Col. Robert A. Starr, Deputy



FORT MASON, CALIF. VIPs who attended East Bay Chapter's reception at Oakland Army Terminal's Officers Club on 16 October. Left to right: Hon. Clifford E. Rishell, Mayor of Oakland; Lt. Gen. C. D. Palmer, CG, Sixth Army; Arthur C. Ames, Chapter President; Leland Sweeney, Chairman of Alameda County Board of Supervisors.

CO of Decatur Signal Depot, reported on AUSA's 1958 Annual Meeting.

MANNHEIM CHAPTER—Secretary: Capt. J. H. Hunt, Hq and Svc Co., U. S. Army Garrison, HACOM, APO 333, New York, New York. President: Lt. Col. R. S. Boyer; First Vice President: Major C. E. Rose; Second Vice President: Lt. Col. L. S. Karawski; Treasurer: Sgt. J. W. Wilson.

MARNE CHAPTER—Secretary: Lt. Col. Paul S. Lindberg, 3d Infantry Division, 3d Admin. Co., APO 36, New York, New York. Honorary Presidents: Maj. Gen. John S. Upham, Jr. and Maj. Gen. Roy E. Lindquist; President: Col. David C. Lewis; First Vice President: Col. Charles B. Smith; Second Vice President: Lt. Col. John E. Beebe, Jr.; Treasurer: Maj. Alois L. Steinbach.

MILWAUKEE CHAPTER—Secretary: Mr. George Comte, 5009 N. Cumberland Blvd., Milwaukee, Wisconsin. President: Brig. Gen. Don E. Carleton; First Vice President: Mr. G. M. Taylor; Second Vice President: Lt. Col. Roth S. Schleck; Treasurer: Lt. Col. Frank X. Mages.

MONTEREY COUNTY CHAPTER—Box 187, Pebble Beach, California. President: Col. Allen Griffin, AUS-Rtd.; First Vice President: Mr. Joe Juri; Second Vice President: Mr. E. J. Dawley; Secretary: Mr. Richard Bennett; Treasurer: Col. F. A. Heywood, Rtd.

Lt. Gen. C. D. Palmer, CG, Sixth U. S. Army, spoke to the Chapter on research and development of tactics, doctrine and weapons at meeting 19 November, held at Fort Ord.

MOTHER LODGE CHAPTER—Secretary-Treasurer: Lt. Col. William L. Shaw, NGUS, Sacramento Signal Depot, Sacramento, Calif. President: Mr. George H. Holt; First Vice President: Col. Albert E. Billing, USA-Rtd.; Second Vice President: Col. Joseph S. Gorfinski, USA-Rtd.; Asst. Secretary-Treasurer: Capt. Robert N. Dempster, USA.

MCCOY-RED CLOUD CHAPTER—Secretary: Mr. Robert Ninneman, 1005½ Superior Street, Tomah, Wisc. President: Mr. Frederic D. Rahr; First Vice President: Mr. Don Harris; Second Vice President: Mr. John Kaehler; Treasurer: Mr. Stuart Latimer.

NEBRASKA CHAPTER—President: Col. Kermit Hansen, USAR, 1300 Woodmen of the World Bldg., Omaha 2, Nebraska; Vice President: Maj. Charles E. Artzberger, USAR; Secretary-Treasurer: Capt. Robert C. Fisk, USAR.

NEW ORLEANS CHAPTER—4400 Dauphine St., New Orleans 40, La. President: Mr. Wallace M. Davis; First Vice President: Col. Donald E. MacDonald; Second Vice President: Brig. Gen. Robert V. Maraist, USA-Rtd.; Third Vice President: Lt. Col. Jonas C. Spurl; Secretary: Maj. Louis Robillia, Jr., USAR; Treasurer: Mr. Newton D. McLean.

NEW YORK CHAPTER—President: Colonel Charles I. Katz, USAR, 60 E. 42nd St., New York 17, New York; First Vice President: Col. Leo A. Lieberman, USAR; Second Vice President: Col. James V. Demarest, USAR; Secretary: Lt. Col. Daniel J. Kern, USAR; Treasurer: Col. Lloyd W. Stearns, USAR.

Something new, a West Point Party, was so successful it may become an annual event of the Chapter. On 4 October 81 members and guests (including 30 women) met at West Point at 1030, and toured the Academy. Among the events witnessed were a cadet review, and the West Point-Penn State football game. Lunch was at the Officers Club.



GERMANY. MSgt John L. Douglas (left) reports to Brig. Gen. William F. Train, President of 8th Infantry Division Chapter, on his activities as Chapter's representative at the Fourth Annual Meeting in Washington last October. General Train and MSgt Charles T. Root, Chapter Secretary, admire brief case presented by AUSA to members attending.

NEWTON D. BAKER CHAPTER—Secretary: Col. Richard L. Gillespie, USAR, Veterans Admin. Regional Office, Cuyahoga Building, Cleveland 14, Ohio. President: Hon. Robert H. Jamison; First Vice President: Gen. William F. Hoge, USA-Rtd.; Second Vice President: Brig. Gen. George R. Schmucker, USAR-Rtd.; Treasurer: Lt. Col. Henry E. Zachman, USAR.

NORTH FLORIDA CHAPTER—P.O. Box 731, Tallahassee, Florida. President: Lt. Col. Jessie F. Warren, USAR; First Vice President: Lt. Col. Jay L. Hall, NGUS; Second Vice President: Lt. Col. Samuel L. McCall, USAR; Secretary: MSgt William L. Tumlin, RA-Rtd.; Treasurer: Lt. Col. John E. Miklos, USAR.

NORTH CENTRAL ARIZONA CHAPTER—President: Col. Ralph Wiltamuth, 541 W. Marletta St., Phoenix, Ariz.; First Vice President: Mr. George Bond; Second Vice President: Mr. Verland M. Haldiman; Secretary: Mrs. Lucile Sutter; Treasurer: Mr. C. E. Gollwitzer.

NORTHEAST FLORIDA CHAPTER—P.O. Box 3141, Jacksonville, Florida. President: Lt. Col. Henry J. Wolfs, USAR; First Vice President: Mr. Frank F. Strickland; Second Vice President: Mr. J. A. Dionne; Secretary: CWO Robert J. Crawford, USAR; Treasurer: Mr. Jacob W. Dehaan.

NORTHERN DELAWARE CHAPTER—P. O. Box 607, Wilmington 99, Delaware. President: Col. James W. Nichols; First Vice President: Mr. Henry N. Marsh; Second Vice President: MSgt J. E. Mastin; Secretary: 1st Lt. Donn Devine.

NURNBERG AREA CHAPTER—Secretary: Capt. H. A. Beuke, Hq. 2nd Armored Cavalry, APO 696, New York, N. Y. President: Col. L. R. Wilcox; First Vice President: MSgt M. E. Daniels; Second Vice President: Col. J. D. Peterman; Treasurer: MSgt C. C. Uzzell.

OKLAHOMA CITY CHAPTER—1101 North Broadway, Oklahoma City, Oklahoma. President: Brig. Gen. F. J. Reichman; Vice Presidents: Brig. Gen. Fred A. Daugherty; Brig. Gen. Paul B. Bell; Secretary: 1st Lt. Ruth Anne Love; Treasurer: Capt. Victor Stangel.

ORLEANS CHAPTER—Secretary: 1st Lt. Kenneth Patterson, CO, Co B, 553d Engr Bn, (C), APO 58, New York, N. Y. President: Col. Harry J. Engel; First Vice President: Lt. Col. Arthur D. Stout; Second Vice President: MSgt Charles M. Eatley; Treasurer: MSgt John H. Smith.

OSARK CHAPTER—Secretary: Capt. Richard H. Thompson, Fort Chaffee Exchange, Fort Chaffee, Arkansas. President: Mr. James H. Clendenning; First Vice President: Mr. William E. Drenner; Second Vice President: Mr. James S. Beckman; Treasurer: MSgt Daniel A. Reed.

PALM BEACH CHAPTER—2901 Tuxedo Ave., West Palm Beach, Florida. President: Col. Raymond Shepley, USAR; First Vice President: Maj. Gilbert S. Swem, USA-Rtd.; Second Vice President: Capt. Robert de Marcellus, FNG; Secretary: Lt. Col. Earl Martin, USAR; Treasurer: MSgt Harvey J. Bixler, USAR.

PIKES PEAK CHAPTER—P.O. Box 2442, Colorado Springs, Colorado. President: Lt. Col. J. D. Ackerman, USAR; Executive Vice President: Major Gen. William H. Gill, USA-Rtd.; Vice President for Programs: Mr. John A. Love; Vice President for Membership: Mr. Oscar C. Watson; Secretary: Lt. Col. William Porte; Treasurer: Mr. Darald A. Wilkinson.

PINELLAS CHAPTER—Secretary-Treasurer: MSgt William M. Bohannon, Jr., USAR, Post Office Box 1687, St. Petersburg 1, Florida. President: Brig. Gen. E. W. Piburn, USA-Rtd.; First Vice President: Col. James P. Schwartz, USAR; Second Vice President: Col. Alex J. Robinet, USAR-Rtd.; Third Vice President: Col. Nonie W. Gable, NGUS.

POCONO MOUNTAINS CHAPTER—Secretary: Lt. Col. Joseph J. Williams, Tobyhanna Signal Depot, Tobyhanna, Penna. President: Col. Clifford A. Poutre; First Vice President: Lt. Col. Frank Townend, PARNG; Second Vice President: Capt. Edward A. Lukas, USAR; Treasurer: Mr. Francis S. Rotunda.

POLK CHAPTER—Secretary: Capt. Frederick D. MacDuffee, 1st How Bn, (105mm SP) 6th Arty, Fort Polk, La. President: Mr. W. H. Morris; First Vice President: Mr. F. H. Coughlin; Second Vice President: Mr. H. P. McElveen; Treasurer: Mr. K. Pigott.

THE RYUKYUS CHAPTER—Secretary: Maj. L. P. Lansing, Hq, USARY IX Corps, APO 331, San Francisco, Calif. President: Col. E. C. Coffin; First Vice President: SFC L. R. Fulcomer; Second Vice President: CWO R. W. Allen; Treasurer: Mr. A. H. Bulkley.

Planning meeting held on 22 September to organize committees and prepare for future programs.

SAN BERNADINO COUNTY CHAPTER—Secretary: MSgt Fred W. Grigsby, Camp Irwin, Calif. President: Mr. Hugo Wilde; First Vice President: Mr. Victor J. Smith; Second Vice President: Lt. Col. Christian E. Petersen, AUS-Rtd.; Treasurer: MSgt Gerald E. Morgan.

SAN FRANCISCO CHAPTER—Secretary: Col. C. C. W. Allan, Deputy Chief of Staff for Public Affairs, Hq Sixth U. S. Army, Presidio of San Francisco, California. President: Mr. William M. McNabb; First Vice President: Lt. Gen. Claude B. Ferenbaugh, USA-Rtd.; Second Vice President: Lt. Col. Phillip J. Sinnott, AUS-Rtd.; Treasurer: Mr. Albert Leslie.

SANTA BARBARA-VENTURA COUNTY CHAPTER—Secretary-Treasurer: Maj. Albert D. MacArthur, USA-Rtd., 735 State Street, Santa Barbara, California. President: Brig. Gen. Charles A. Ott, Jr., CNG; First Vice President: Mr. Arthur F. Duncan; Second Vice President: Mr. Marton A. Smith; Third Vice President: Mr. Elmer Coopersmith; Fourth Vice President: Capt. Lloyd F. Oleson, Rtd.

SARASOTA-BRADENTON AREA CHAPTER—P.O. Box 3636, Sarasota, Florida. President: Lt. Col. James F. Kahlenberg, USAR; First Vice President: Capt. Donald Larsen, USAR; Second Vice President: Lt. Col. Gerald Ludwig, USAR; Third Vice President: Major W. S. Telford, Jr., USAR; Secretary-Treasurer: Lt. Col. Edward J. Heney, USAR.

SEATTLE CHAPTER—The Officers' Open Mess, Fort Lawton, Washington. President: Mr. Joseph A. Sweeney; First Vice President: Brig. Gen. Harold L. Goss, USAR-Rtd.; Second Vice President: Col. George H. Revelle, USAR; Secretary: Col. Harper B. Cowles; Treasurer: Col. John T. Glase, USAR.



FORT BENNING, GA. Senator Richard B. Russell of Georgia (right), Chairman of the Senate Armed Services Committee, with Maj. Gen. Paul L. Freeman, Jr., CG, USA Infantry Center, at the dinner-meeting of the Columbus-Phenix City-Fort Benning Chapter on 12 November. Guest speaker Russell addressed more than 600 members of the Chapter.

SIoux FALLS CHAPTER—*Secretary:* Capt. James E. Moore, 2316 S. Third Street, Sioux Falls, S. D. *President:* Mr. Dan Dugan; *First Vice President:* Mr. Al A. Schock; *Second Vice President:* Mr. William C. Duffy; *Treasurer:* 1st Lt. Fred Masek.

SOUTH FLORIDA CHAPTER—Dade County Armory, 2728 NW 7th Avenue, Miami, Fla. *President:* Lt. Col. Thomas A. Price, USAR-Rtd.; *First Vice President:* Maj. John J. Rooks, NG; *Second Vice President:* Lt. Col. Matthew M. Slepik, USAR; *Secretary:* Harold M. Word, NG, *Treasurer:* Capt. Douglass D. King, Jr., USAR.

SOUTH HAMPTON ROADS CHAPTER—6410 George Washington Highway, Portsmouth, Virginia. *President:* Mr. Ralph L. Horn; *First Vice President:* Mr. Richard A. Atkinson; *Second Vice President:* Col. Conan W. Vaughan, Jr., USAR; *Secretary:* Mr. A. C. Bartlett; *Treasurer:* MSgt Stanley Romanic.

SOUTHEAST ALABAMA CHAPTER—P.O. Box 159, Fort Rucker, Alabama. *President:* Mr. James Park; *First Vice President:* Mayor Douglas Brown; *Second Vice President:* Mr. Fred Fleming, Jr.; *Third Vice President:* Mayor Maxwell N. Brown; *Secretary-Treasurer:* Lt. Col. Robert Huffaker.

SOUTHEASTERN NEW MEXICO CHAPTER—*Secretary:* Mr. William I. Anderson, DAC, Military Science Building, NMMI, Roswell, New Mexico. *President:* Maj. Leonard M. Witcher, USAR; *First Vice President:* Capt. Roland Tessier, NG; *Second Vice President:* 1st Lt. Dick Mulkey, USAR; *Treasurer:* Capt. Roy Fry, NG.

SOUTHERN ARIZONA CHAPTER—Box 5811, Tucson, Ariz. *President:* Mr. F. W. Boyd Allen; *First Vice President:* Mr. James Brophy; *Second Vice President:* Mr. George Weiss; *Secretary-Treasurer:* Mr. Aaron Paul.

SOUTHWEST OKLAHOMA CHAPTER—P.O. Box 1345, Fort Sill, Oklahoma. *President:* Col. Joseph R. Peller; *First Vice President:* Mr. Parks Stoval; *Second Vice President:* Mr. Glen Dutcher; *Secretary:* Capt. Fletcher W. Fraley; *Treasurer:* Brig. Gen. John F. Bird, Rtd.

Mr. Bernell Gilbert briefed meeting on 3 November on AUSA's 1958 Annual Meeting. Other business included discussions on Chapter territory, presentation of awards, and interior reorganization as suggested at Annual Meeting.

TAMPA AREA CHAPTER—*President:* Lt. Col. Arthur D. Brown, P.O. Box 434, Tampa 1, Florida; *First Vice President:* Lt. Col. Judson B. De Loach; *Second Vice President:* Maj. Lambert P. Friederich; *Third Vice President:* 1st Lt. John Clements; *Secretary:* MSgt Aubrey W. Akin; *Treasurer:* Lt. Col. Wendell S. Lucas.

3d ARMORED DIVISION CHAPTER—*Secretary:* Maj. Thomas A. Cookingham, Hq Combat Command B, 3d Armored Division (Spearhead), APO 39, New York, New York. *President:* Col. Donald L. Sallee; *First Vice President:* Lt. Col. Robert J. Bennett; *Second Vice President:* Lt. Col. George G. Washburn; *Treasurer:* MSgt John J. Purcell.

TOPEKA CHAPTER—*Secretary:* Mr. Bill M. Stevick, U. S. Army Reserve Training Center, 21st and Washington, Topeka, Kansas. *President:* Mr. Harry W. Colmery; *First Vice President:* Mr. George C. Schnellbacher; *Second Vice President:* Mr. Dale E. Moorman; *Treasurer:* Mr. Henry B. Alberg.

TRI-VALLEY CHAPTER—c/o Unit Advisor, United States Army Reserve, Fargo, N. D. *President:* Maj. Julian L. Benshoof, USAR; *First Vice President:* Mr. Truman C. Wold; *Second Vice President:* Maj. Adolph K. Stromme, USAR; *Corresponding Secretary:* Col. Sidney E. Iverson, USAR; *Recording Secretary:* MSP Frank C. Gumeringer, USAR; *Treasurer:* MSgt Martin A. Holsen, USNG; *Chaplain:* 1st Lt. Archie N. Campbell, USAR.

TWIN CITIES CHAPTER—*Secretary:* Col. John H. Derrick, USA-Rtd., 950 McKnight Building, Minneapolis 1, Minn. *President:* Mr. R. B. Rathbun; *First Vice President:* Brig. Gen. James H. Myers, USAR; *Second Vice President:* Mr. Clyde A. Parton; *Treasurer:* Lt. Col. Robert L. Stuebing, USAR.

VERDUN CHAPTER—*Secretary:* Maj. Chesley J. Noel, Hq U. S. Army COMZ ADSEC, APO 122, New York, N. Y. *Honorary President:* Brig. Gen. Robert J. Fleming, Jr.; *President:* Col. Harvey Bower; *First Vice President:* Lt. Col. Randolph H. Vinding; *Second Vice President:* MSgt Robert R. Seigel; *Treasurer:* CWO-2 Arthur Olliffe.



FORT LEAVENWORTH, KANS. Civilian and military members of Henry Leavenworth Chapter at the regular fall dinner-meeting held early in November. Left to right: Harold E. Purdy, President; Lt. Gen. Arthur G. Trudeau, Chief of R&D, guest speaker; Charles S. Stevenson, Civilian Aide to the Secretary of the Army; Maj. Gen. Lionel C. McGarr, Commandant of CGSC.

VIRGINIA PENINSULA CHAPTER—Box 11, Fort Monroe, Virginia. *President:* Mr. George T. Abernathy; *First Vice President:* Lt. Col. Richard Newman; *Second Vice President:* Mr. Robert J. Curtin; *Secretary:* Mr. Reinhold W. Herman; *Treasurer:* Mr. William F. Hampshire.

Charter presentation program on 19 November featured a speech by the Hon. Frank H. Higgins, Assistant Secretary of the Army, who also presented the charter. The meeting was held in the Virginia Room of the Chamberlin Hotel. The Second U. S. Army Chorus, directed by 1st Lt. William D. Rickard, provided entertainment for the meeting. Attractive printed programs were souvenirs of the occasion.

WASHINGTON STATE CHAPTER NO. 1—*Secretary:* Lt. Col. John A. Spencer, Fort Lewis Exchange, Fort Lewis, Washington. *President:* Mr. Harry L. Minor; *First Vice President:* Mr. Fred C. Osmer; *Second Vice President:* Mr. Ray Clark; *Treasurer:* Mr. R. Nat Hatcher.

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ROTC COMPANIES

CANISIUS COLLEGE COMPANY, Canisius College, Buffalo, New York —*Captain:* Cadet George D'Amico; *First Lieutenant:* Cadet Patrick Cunningham; *Second Lieutenant:* Cadet Edward McLaughlin; *First Sergeant:* Cadet Joseph Bermingham.

CAVALIER COMPANY, University of Detroit, Detroit, Michigan —*Captain:* Cadet Thomas L. Campbell; *First Lieutenant:* Cadet Michael J. Wells; *Second Lieutenant:* Cadet Lawrence J. Youngblood; *First Sergeant:* Cadet William E. Wyllie; *Sergeant:* Cadet Thomas A. Murphy.

CITADEL COMPANY, The Citadel, Charleston, S. C. —*Captain:* Cadet Ronald Zeltman; *First Lieutenant:* Cadet Eugene Cannon; *Second Lieutenant:* Cadet Jerry Wright; *First Sergeant:* Cadet Art Richards.



FORT KNOX, KY. Outgoing and incoming officers of Kentuckiana Chapter at a recent luncheon honoring Maj. Gen. Paul A. Disney, CG of the Training Center. Seated, left to right: Col. S. D. Slaughter, new Second Vice President; General Disney; Col. Arthur Bonnycastle, KNG, new President; Lt. Col. Duke McAntee, outgoing First Vice President. Standing, left to right: Major Bentley B. Mackay, new Secretary; Capt. Robert Pratt, outgoing Secretary; Capt. Donald Whitehead, outgoing Treasurer; Capt. Robert Leavitt, new Treasurer.

CLARKSON COMPANY, Clarkson College of Technology, Potsdam, New York—*Captain:* Cadet Kenneth Kittelberger; *First Lieutenant:* Cadet Chip Brault; *Second Lieutenant:* Cadet Everett Greenwood; *First Sergeant:* Cadet Rolfe Gerhardt.

COLORADO STATE UNIVERSITY COMPANY, Colorado State University, Fort Collins, Colorado—*Captain:* Cadet G. William Scott; *First Lieutenant:* Cadet Alden V. Hill; *Second Lieutenant:* Cadet Frank E. Edlin, Jr.; *First Sergeant:* Cadet Thomas N. Williamsen.

DAKOTA COMPANY, North Dakota Agricultural College, Fargo, N. D.—*Captain:* Cadet John H. Huntley; *First Lieutenant:* Cadet James A. Maetzold; *Second Lieutenant:* Cadet William K. Fraase; *Social Chairman:* Cadet Stanley F. Lindline; *First Sergeant:* Cadet Richard E. Eggen.

Mr. Lee, a native of Formosa, spoke to the 30 October meeting on the international problems in that portion of the Far East. Cadet Huntley, Captain of Dakota Company, spoke on reasons for joining AUSA.

DICKINSON COLLEGE COMPANY, Dickinson College, Carlisle, Pennsylvania—*Captain:* Cadet J. P. Wade; *First Lieutenant:* Cadet E. Gottschall; *Second Lieutenant:* Cadet B. Falconer; *First Sergeant:* Cadet W. W. Humes; *PIO Sergeant:* Cadet R. D. Charles.

Nineteen new members were inducted at a meeting on 4 November, which also featured films on airborne training.

DUQUESNE UNIVERSITY COMPANY, Duquesne University, Pittsburgh 19, Pa.—*Captain:* Cadet Francis R. Schmidt; *First Lieutenant:* Cadet Eligio A. Deluca; *Second Lieutenant:* Cadet Robert Rocks; *First Sergeant:* Cadet James H. McAllister.

EASTERN CADET OFFICERS COMPANY, Eastern Kentucky State College, Richmond, Kentucky—*Captain:* Cadet Estel M. Hobbs; *First Lieutenant:* Cadet Larry W. Wood; *Second Lieutenant:* Cadet Wilburn H. Harmon; *First Sergeant:* Cadet Delbert F. Shouse.

EDMUND R. WALKER COMPANY, University of Connecticut, Storrs, Connecticut—*Captain:* Cadet Juris Lapins; *First Lieutenant:* Cadet Juri Martinson; *Second Lieutenant:* Cadet Alan S. Cooper; *First Sergeant:* Cadet John A. DelBuono.

Company held reception for Junior class cadets on 16 October; business meeting on 14 November heard report on very successful participation at the University Activities Fair (Company's display drew 150 spectators), and received thanks of Scabbard and Blade for its cooperation in the Military Ball.

FARRIS-WARE AUSA COMPANY, Prairie View A&M College, Prairie View, Texas—*Captain:* Cadet Carl L. Young; *First Lieutenant:* Cadet Marvin D. Brailsford; *Second Lieutenant:* Cadet Alderus Stewart; *First Sergeant:* Cadet Leonard C. Gee.

FLORIDA SOUTHERN COLLEGE COMPANY, Florida Southern College, Lakeland, Florida—*Captain:* Cadet Robert P. Jones; *First Lieutenant:*

Cadet Richard Fulford; *Second Lieutenant:* Cadet William Hatton; *First Sergeant:* Cadet John D. Watson.

GEORGETOWN UNIVERSITY ROTC COMPANY, Georgetown University, Washington, D. C.—*Captain:* Cadet Richard R. Robinson; *First Lieutenant:* Cadet Eric Sullivan; *Second Lieutenant:* Cadet Paul G. Dasso; *First Sergeant:* Cadet James E. Lodge.

New First Lieutenant elected at meeting 28 October; plans laid for Military Ball.

GORDON COMPANY, Gordon Military College, Barnesville, Georgia—*Captain:* Cadet James E. Ethridge; *First Lieutenant:* Cadet David L. Camner; *Second Lieutenant:* Cadet Daniel E. Zellner; *First Sergeant:* Cadet Dennis McKoy.

IDAHO STATE COLLEGE COMPANY, Idaho State College, Pocatello, Idaho—*Captain:* Cadet Harvey I. Buckles; *First Lieutenant:* Cadet Corwin Lott; *Second Lieutenant:* Cadet Brent M. Holmes; *First Sergeant:* Cadet John A. Duff.

Captain Frederick A. Hunter, Company Adviser, spoke to meeting on 25 November on STRAC. Five new members were accepted.

ILLINI COMPANY, University of Illinois, Champaign, Illinois—*Captain:* Cadet Ed Madsen; *First Lieutenant:* Cadet Tom Metzger; *Second Lieutenant:* Cadet Dick Bartsch; *First Sergeant:* Cadet Bill Miner.

Prof. R. L. Butwell, of the University's Department of Political Science, addressed November meeting on problems in the Near East and Far East.

INDIANA STATE TEACHERS COLLEGE ROTC COMPANY, State Teachers College, Indiana, Pennsylvania—*Captain:* Cadet William Vernon Miller; *First Lieutenant:* Cadet Warren Neal Edmiston; *Second Lieutenant:* Cadet Richard A. Erickson; *First Sergeant:* Cadet Arthur J. Cornell.

JOHN CARROLL UNIVERSITY COMPANY, John Carroll University, Cleveland 18, Ohio—*Captain:* Cadet James Lawlor; *First Lieutenant:* Cadet Donald Gould; *Second Lieutenant:* Cadet Thomas Barrowman; *First Sergeant:* Cadet Robert Kapitani.

Company is organizing a speakers' bureau to address neighboring colleges and high schools on the ROTC program.

KEMPER MILITARY SCHOOL COMPANY, Kemper Military School, Boonville, Missouri—*Captain:* Cadet M. R. Richardson; *First Lieutenant:* Cadet Joseph N. Sailor; *Second Lieutenant:* Cadet R. A. Wagner; *First Sergeant:* Cadet Merle E. Duensing.

LA SALLE ROTC COMPANY, La Salle Military Academy, Oakdale, Long Island, New York—*Captain:* Cadet Pasquale Di Lorenzo; *First Lieutenant:* Cadet Raymond Aexel; *Second Lieutenant:* Cadet Albert Pardini; *First Sergeant:* Cadet Andrew Capelli.

LOUISIANA STATE UNIVERSITY COMPANY, Louisiana State University, Baton Rouge 3, Louisiana—*Captain:* Cadet John D. Badeaux; *First Lieutenant:* Cadet Sidney P. Dugas; *Second Lieutenant:* Cadet Richard A. Lipsey; *First Sergeant:* Cadet Lloyd C. Dupuy.

LOYOLA COLLEGE COMPANY, Loyola College, Baltimore 10, Md.—*Captain:* Cadet William R. Gegner; *First Lieutenant:* Cadet Hugh F. McKenna, Jr.; *Second Lieutenant:* Cadet William A. Noonberg; *First Sergeant:* Cadet Peter C. Santoni.

Cadet Gegner, Captain of Loyola Company, reported to meeting on 2 November on his participation at AUSA's 1958 Annual Meeting. Captain Ritter spoke on the aims and objectives of the Association. New members were accepted.

THE LOYOLA UNIVERSITY COMPANY, Loyola University, 6525 Sheridan Road, Chicago 26, Illinois—*Captain:* Cadet Joseph M. Burke; *First Lieutenant:* Cadet David Lynch; *Second Lieutenant:* Cadet Edward Ptajeh; *First Sergeant:* Cadet John Dentzer; *Master Sergeants:* Cadets Lewis Towers, John Sweetman, James Vinci.

Col. Robert Sullivan, Fifth U. S. Army Provost Marshal, spoke on the duties of the provost marshal at 6 November meeting. The Company accepted 13 new members at this meeting.

LT. CHARLES J. FITE COMPANY, Gettysburg College, Gettysburg, Pennsylvania—*Captain:* Cadet Henry F. Coyne; *First Lieutenant:* Cadet Gary L. Seufert; *Second Lieutenant:* Cadet James D. Dethlesen; *First Sergeant:* Cadet Ronald E. Nitzsche.

MAD ANTHONY WAYNE COMPANY, University of Toledo, Toledo, Ohio—*Captain:* Cadet Glenn Reeder; *First Lieutenant:* Cadet Thomas

E. Kerscher; *Second Lieutenant*: Cadet Ronald P. Shetter; *First Sergeant*: Cadet Robert H. Smith.

THE MANLIUS COMPANY, The Manlius School, Manlius, New York—*Captain*: Cadet William W. Rankin; *First Lieutenant*: Cadet Taylor Devine; *Second Lieutenant*: Cadet John Ramsey; *First Sergeant*: Cadet Russell A. Jahn; *Staff Sergeant*: Cadet Peter Cookson.

MOCCASIN COMPANY, University of Chattanooga, Chattanooga, Tenn.—*Captain*: Cadet Lee Godfrey; *First Lieutenant*: Cadet Hinman Rizer; *Second Lieutenant*: Cadet Don Hedrick; *First Sergeant*: Cadet Jerry Moye.

Cadets Larry Schwartz and Jerry Payne reported to meeting on 13 November on their experiences at AUSA's 1958 Annual Meeting. The meeting honored the new members of the Company.

MONTANA STATE UNIVERSITY ARMY ROTC COMPANY, Montana State University, Missoula, Montana—*Captain*: Cadet Harold Archibald; *First Lieutenant*: Cadet Larry Newell; *Second Lieutenant*: Cadet William Steinbrenner; *First Sergeant*: Cadet William Crawford.

A meeting, primarily to plan the year's activities, was held on 23 October. Lt. Col. William J. Lewis, PMST, spoke on leadership and its importance to officers of the Army; Capt. Robert L. Harper discussed the pay and allowances of second lieutenants.

NEW YORK UNIVERSITY HEIGHTS COMPANY, New York University, 181st St. and University Ave., New York 53, New York—*Captain*: Cadet William S. Montag; *First Lieutenant*: Cadet Charles J. Harris; *Second Lieutenant*: Cadet Ronald DiStefano; *First Sergeant*: Cadet Joseph P. Bohn.

PENNSYLVANIA STATE UNIVERSITY COMPANY, The Pennsylvania State University, University Park, Pennsylvania—*Captain*: Cadet Alan E. Lees; *First Lieutenant*: Cadet William C. Abbey; *Second Lieutenant*: Cadet Patrick C. Kinney; *First Sergeant*: Cadet Ward R. Swain.

RAM COMPANY, Fordham University, New York 58, New York—*Captain*: Cadet Nicholas E. Barreca; *First Lieutenant*: Cadet Anthony D. Imhof; *Second Lieutenant*: Cadet Edward H. Cummings; *First Sergeant*: Cadet Anthony D. Sullivan.

ROBERT E. SYLVEST COMPANY, Northwestern State College of Louisiana, Natchitoches, Louisiana—*Captain*: Cadet John Vermaelin; *First Lieutenant*: Cadet John Barkate; *Second Lieutenant*: Cadet Edwin Cathey; *First Sergeant*: Cadet Michael Murphy.

Fourteen new members accepted on 26 November; AUSA shoulder cords were issued at this meeting.

SIENA ROTC COMPANY, St. Bernardine of Siena College, Loudonville, New York—*Captain*: Cadet Paul R. Riley, Jr.; *First Lieutenant*: Cadet John W. Stahlman; *Second Lieutenant*: Cadet Louis R. LaGasse; *First Sergeant*: Cadet J. Vincent Chesterfield.

SIOUX COMPANY, University of North Dakota, Grand Forks, North Dakota—*Captain*: Cadet Austin R. Smith; *First Lieutenant*: Cadet James F. Marquardt; *Second Lieutenant*: Cadet Terry N. Thorstenson; *First Sergeant*: Cadet Bruce D. Sillers.

Dr. Shauber, Assistant Professor of German and a former officer of the German Army, spoke to 13 November meeting on his experiences in the Russian campaign, followed by a question-and-answer session.



BLACKSBURG, VA. Cadet Lt. Norman T. Shelton (center) accepts the award for winning a nine-mile hike during the initiation in the VPI ROTC Company of AUSA. Presenting the award is Cadet Capt. A. B. Childrey, Company Captain, while Col. Addison V. Dishman (far right), CO, Radford Arsenal, looks on.

"SOONER COMPANY", University of Oklahoma, Norman, Oklahoma—*Captain*: Cadet W. R. Delp; *First Lieutenant*: Cadet J. K. Smith; *Second Lieutenant*: Cadet W. R. Rhynes; *First Sergeant*: Cadet E. D. Lazorchak.

Meeting on 14 November went on record as favoring compulsory ROTC at the University. Action was taken on many other agenda items, including discussion of the fact that ROTC delegates have no vote at AUSA Annual Meetings. Film on *Trainfire* concluded the meeting.

ST. NORBERT COLLEGE COMPANY, St. Norbert College, West de Pere, Wisconsin—*Captain*: Cadet Jerald A. Mayhew; *First Lieutenant*: Cadet Paul F. Sinkler; *Second Lieutenant*: Cadet Gary H. Brux; *First Sergeant*: Cadet Herbert M. Heili.

Meeting on 27 October was strictly business, touching on plans to send representative to 1959 Annual Meeting, and election of officers.

TEXAS CHRISTIAN UNIVERSITY COMPANY, Texas Christian University, Fort Worth 9, Texas—*Captain*: Cadet James B. Alsip; *First Lieutenant*: Cadet Bill A. Kithas; *Second Lieutenant*: Cadet Sidney Poynter; *First Sergeant*: Cadet Ray Leuty; *Sergeants*: Cadets James L. Goode, Kenneth Pierce, Warner Bailly.

TEXAS TECH COMPANY, Texas Theological College, Lubbock, Texas—*Captain*: Cadet Gerald V. McWilliams; *First Lieutenant*: Cadet Alfred D. Holder; *First Sergeant*: Cadet Norman B. Bookout.

TULANE ROTC COMPANY, Tulane University, New Orleans 18, Louisiana—*Captain*: Cadet Terrence D. Sargent; *First Lieutenant*: Cadet Robert D. Mitchell, Jr.; *Second Lieutenant*: Cadet Roy S. Lombardo; *First Sergeant*: Cadet Jac L. King.

UNIVERSITY OF IDAHO COMPANY, University of Idaho, Moscow, Idaho—*Captain*: Cadet Richard A. Koster; *First Lieutenant*: Cadet Bruce G. Summers; *Second Lieutenant*: Cadet Fred L. Ringe; *First Sergeant*: Cadet Kent E. Harrison.

UNIVERSITY OF TEXAS COMPANY, University of Texas, Austin 12, Texas—*Captain*: Cadet Lewis Donaghey; *First Lieutenant*: Cadet James Kazen; *Second Lieutenant*: Cadet Joe Stoeltje; *First Sergeant*: Cadet George Batchelor.

V. RAYMOND EDMAN COMPANY, Wheaton College, Wheaton, Illinois—*Captain*: Cadet David Hall; *First Lieutenant*: Cadet Harry C. Beaver; *Second Lieutenant*: Cadet James C. Arison; *First Sergeant*: Cadet Stanley D. Anderson.

VALLEY FORGE COMPANY, Valley Forge Military Academy, Wayne, Pennsylvania—*Captain*: Cadet Richard Goodstein; *First Lieutenant*: Cadet James White; *Second Lieutenant*: Cadet Chris Riker; *First Sergeant*: Cadet John W. Gunn.

New members were accepted into the Company at meeting on 9 November; lecture on education in the Army, and film comparing Soviet and U. S. systems of education completed the program. The Company traveled to Washington Memorial Chapel at Valley Forge on 6 November to hear a lecture on the evolution of the rifle, and to tour the Museum.

VIRGINIA POLYTECHNIC INSTITUTE COMPANY, Virginia Polytechnic Institute, Blacksburg, Virginia—*Captain*: Cadet A. B. Childrey; *First Lieutenant*: Cadet C. E. Longest; *Second Lieutenant*: Cadet D. R. Stanton; *First Sergeant*: Cadet W. A. Stuart.

Col. Addison V. Dishman, CO, Radford Arsenal, was the principal speaker at the Annual Initiation Banquet on 5 November. Colonel Dishman's subject was leadership. New members of the Company, as part of their pledge duties, completed a nine-mile forced march; 14 were accepted into the Company.

WASHINGTON AND JEFFERSON ROTC COMPANY, Washington and Jefferson College, Washington, Pennsylvania—*Captain*: Cadet Robert O. Hays; *First Lieutenant*: Cadet Thomas A. Halter; *Second Lieutenant*: Cadet Geoffrey W. Bennett; *First Sergeant*: Cadet John S. Perry.

Maj. William G. Joe, Company Adviser, spoke to the 19 November meeting on the U. S. Army Reserve program and USAR requirements. Cadet Perry, First Sergeant of the Company, spoke on AUSA aims and objectives. Coffee and doughnuts were served after the meeting.

WEST TEXAS STATE COMPANY, West Texas State College, Canyon, Tex.—*Captain*: Cadet Joe Giddens; *First Lieutenant*: Cadet Elvin J. Schofield; *Second Lieutenant*: Cadet Don Broome; *First Sergeant*: Cadet Fontis B. Sexton.

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